

Jefferson Parish Professional Services Questionnaire
Resolution No. 144202
SOQ NO. 24-015
Routine Engineering Services for Drainage Projects
June 21, 2024



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Statement of Qualifications to Provide Routine Engineering Services for Drainage Projects –
SOQ 24-015; Resolution #144202

B. Firm Name & Address where Project work will be performed:



C. Name, title & contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the state of Louisiana:

Manish Mardia, P.E., President
mmardia@msmmeng.com
(504) 559-1897

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Manish Mardia, P.E., President
mmardia@msmmeng.com
(504) 559-1897

E. Please provide the number of employees whose primary function corresponds with each category:

<u>4</u> Administrative	<u>1</u> Estimators	<u>1</u> Specification Writers
<u>1</u> Architects (Licensed)	<u> </u> Geologists	<u>2</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>7</u> Civil Engineers	<u> </u> Interior Designers	<u>6</u> Project Managers
<u>3</u> Construction Inspectors	<u>1</u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>1</u> Electrical Engineers	<u>1</u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> </u> Engineer Intern	<u>2</u> Environmental Engineers	<u>1</u> Administrative/Accounting
<u> </u> Professional Land Surveyors	<u>3</u> CAD Draftsman	<u>34</u> TOTAL
<u> </u> Environmental Scientist	<u> </u> Transportation Engineer	

F. Is this submittal by a JOINT-VENTURE? Please check:

YES ☐ NO ☒

If marked “No” skip to Section I. If marked “Yes” complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific area of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1. Not Applicable

2.

**H. Has this JOINT-VENTURE previously worked together? Please check:
YES ☐ NO ☒**

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty	Worked with Firm Before (Yes or No):
1. Gulf South Engineering and Testing, Inc. 15 Veterans Memorial Boulevard Kenner LA 70062	Geotechnical Engineering	Yes
2. BFM Corporation, LLC 15 Veterans Memorial Boulevard Kenner LA 70062	Surveying	Yes
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

_____ 25 _____

TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
Mark Wingate, P.E. Executive Vice President
Project Assignment:
Program Manager
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
1 (2024)
Education: Degree(s)/Year/Specialization:
BS in Civil Engineering, 1989, University of New Orleans
Active registration: Year first registered/discipline:
Year First Registered: 2001 Discipline: <u>Civil</u> State: <u>Louisiana</u> License No.: <u>29419</u>
Other experiences and qualifications relevant to the proposed Project:
<p>Mark R. Wingate, P.E., serves as the Executive Vice President at MSMM Engineering, LLC. Mr. Wingate brings over three decades of USACE civil works experience to MSMM, comprising an impressive history in executive-level management experience for delivering flood risk management, hurricane and storm damage risk reduction, navigation, and environmental and coastal restoration/sustainability projects. He served for nearly 31-years with USACE, New Orleans District, which culminated with serving as the Lead Civilian (Deputy District Engineer for Programs and Project Management (DPM)) for nearly 9-years at the New Orleans District. Along the way, he also served in an acting capacity as the MS Valley Division Regional Business Director (SES position), Deputy Advisor on Infrastructure to the Executive Office of the President (EOP), and Chief of the Projects and Restoration Branch in the New Orleans District. Mr. Wingate received the inaugural R. King Milling Distinguished Coastal Service Award from the State of LA in December 2023.</p> <p><u>USACE – Delivery of the 14.6B Hurricane and Storm Risk Reduction System (HSDRRS)</u> As DPM for USACE, New Orleans (MVN), Mr. Wingate was responsible for the completion and the delivery of the ~\$14.6B Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS), a 130-mile-long perimeter system of levees, flood walls, pump stations, navigation gates, and other structures as well as environmental mitigation to reduce flood risk to SE LA. Coordinated closely with the State of LA, CODEL, landowners, levee districts, NGOs, and other key stakeholders to deliver this USACE-World Class System. Coordinated with MVD and Higher Authority on project issues and associated resolutions.</p> <p>Role: DPM/Program Manager</p>

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Mark Wingate, P.E.

Executive Vice President

USACE – New Orleans Branch Chief – Project Management

During his time at USACE, Mr. Wingate was responsible for delivering USACE Civil Works projects in the areas of Flood Risk Management, Ecosystem Restoration, and Navigation. Areas of responsibility included project delivery under RESTORE Act and Lower MS River Diversions, LA Coastal Area (LCA) Ecosystem Restoration, Mississippi River and Tributaries (MR&T), Continuing Authorities Program (CAP), Flood Plain Management Services (FPMS) and Planning Assistance to States (PAS). Coordinated closely with USACE HQ and Division, State and Federal Agencies, NGOs, Parishes, Municipalities, Tribal Nations, and project Stakeholders throughout Southern LA.

Role: Program Manager/Branch Chief

USACE - West Shore Lake Pontchartrain (WSLP) – FRM Construction Project

As MVN DPM, Mr. Wingate oversaw and ensured the advancement of the USACE-WSLP project for St. Charles and St. John Parishes to deliver an 18-mile risk reduction system including earthen levees, T-walls, pump stations and control structures iaw with the feasibility and Chief's report. Also drove advancement of small-scale non-structural solutions including various alignments of ring levees with pumps, access points, etc. for St. James Parish. Successfully secured unplanned funds and initiated a USACE General Reevaluation Report (GRR) to consider resiliency features.

Role: DPM/Program Manager

TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:	
Name & Title:	Manish Mardia, P.E. President
Project Assignment:	Quality Control Manager
Name of Firm with which associated:	MSMM ENGINEERING, LLC
Years' experience with this Firm:	13 (2011)
Education: Degree(s)/Year/Specialization:	M.S. in Civil Engineering, 1994, Louisiana State University B.S. in Civil Engineering, 1990, University of Jodhpur
Active registration: Year first registered/discipline:	Year First Registered: 1999 Discipline: <u>Environmental</u> State: <u>Louisiana</u> License No.: <u>28482</u> <i>Also registered in Mississippi (18522)</i>
Other experiences and qualifications relevant to the proposed Project:	
<p>Manish Mardia is a registered professional civil and environmental engineer and is the President of MSMM Engineering, LLC. He is an experienced engineering manager and principal with over thirty years of experience in managing and designing public works projects. His experience includes environmental assessments, NEPA documentation, planning, design, and construction management for water, wastewater, and solid waste systems for industry and government, design, construction and management of industrial and municipal wastewater treatment facilities, landfill gas collection and control systems, study and management of infiltration and inflow of stormwater into public wastewater collection systems.</p> <p>Mr. Mardia has worked <i>on more than 200 projects for various departments of Jefferson Parish</i>. These projects were successfully completed on time and schedule. Project types include water line replacement design, Environmental Permitting; Hydraulic Modeling; Infiltration and Inflow; Water Treatment and Collection; Wastewater Collection, Distribution, and Treatment; Street and Roadways design; and Landfill Design and Permitting.</p> <p>For a representation of projects completed by Mr. Mardia, please see below:</p> <p><u>Jefferson Parish, East Bank Drainage Master Plan</u> MSMM is performing electrical and instrumentation services for this Jefferson Parish East Bank Drainage Master Plan. The scope of work for these services includes updating existing conditions and analysis of high water conditions. MSMM is furnishing drawings, specifications, and schedules for the project.</p>	

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
Manish Mardia, P.E. President
<p>To update the existing conditions, MSMM is conducting data assembly and field reconnaissance. This involves reviewing GIS and record drawings, leveling loop to correlate datums, and verification of horizontal coordinate and invert. For the model update, MSMM is identifying and documenting all existing nodes and pipes, as well as documenting updated pipes and node coordinates. Work will then include comparing results to storm results, adjusting model parameters, and re-running the model. For the LiDAR update, MSMM is developing a survey scope, coordinating with the surveyor, comparing data, and making recommendations to the Parish.</p> <p>For High Water Elevation Analysis, MSMM is first establishing the definition of high water and identifying canal segments of high water. Work will then involve reviewing impacts and developing ranking criteria, which will include comparing canal WSE to adjacent area LiDAR data (25 sites evaluated) and developing ranking criteria with Jefferson Parish.</p> <p>Role: Mr. Mardia provided QA/QC services for the project as well as interfaced with the client.</p> <p><u>Woodlake Drainage Pump Station with Green Infrastructure Design, Kenner, LA</u></p> <p>The existing drainage system at Woodland Estates and Seton Park consisted of an enclosed gravity storm sewer system that outlet at various locations in the canals. This drainage system was creating a backflow water condition, causing repeated flooding in the area. MSMM completed a drainage evaluation report that evaluated options for removing backflow conditions in the area.</p> <p>MSMM is currently in the process of designing a 120 CFS pump station located in Seton Park as well as a below ground retention feature within Seton Park to capture peak flows. The retention area within the park will consist of a below ground HDPE piping network covering a roughly 75x300 ft. area fed by an overflow junction box. The pump station will be fed from a 60" drain pipe on St. Elizabeth Drive. The two 60" diameter pipes crossing Platt Street and Joe Yenni Blvd to discharge into Canal 7 and 17 will be interconnected to feed the intake of the pump station. Both 60" pipes will be fitted with flapper type gates so that low flows or flows exceeding the pump station capacity could bypass into the canal. The pump station will utilize three pumps and a single 48" force main to discharge the storm water over the West Return Wall. The force main will be approximately 1,200 linear feet and discharge the storm water over the West Return Canal Levee Wall and into the West Return Canal (part of the Lake Pontchartrain drainage system).</p> <p>Role: Mr. Mardia is providing QA/QC during the internal and USACE review process.</p>

TEC Professional Services Questionnaire

KEY PERSON:

Name & Title:

Jim Wilson, P.E., LEED® AP
Vice-President

Project Assignment:

Civil Engineer/Engineering Manager

Name of Firm with which associated:

MSMM
ENGINEERING, LLC

Years' experience with this Firm:

10 (2014)

Education: Degree(s)/Year/Specialization:

B.S. in Civil Engineering, 1988, Michigan Technological University

Active registration: Year first registered/discipline:

Year First Registered: 1993
Discipline: Civil State: Louisiana License No.: 35456
Also registered in Michigan (38800), Texas (128376), and Florida (85114)

Other experiences and qualifications relevant to the proposed Project:

Mr. Wilson is a senior civil/drainage engineer with over 25 years of experience in the public sector, successfully designing and managing drainage, sewerage, roadway, waterlines, and site development projects in multiple jurisdictions of Louisiana and Michigan. Mr. Wilson is the civil engineering manager at MSMM, where he is responsible for the direct design and oversight of civil design, including water line design and water meter replacement design across South Louisiana.

Statewide Flood Control Program Grant Drainage Improvements Kenner, LA

LDOTD's Statewide Flood Control Program grant funding was utilized to undertake stormwater drainage system improvements to two neighborhoods (University City and Audubon Place Subdivisions) in the city. The estimated project cost was \$4.57 million, with a grant amount of \$2.7 million. The project was conducted from beginning to conclusion, which included preparing the grant pre-application package, coordinating with the City and LDOTD staff, conducting hydraulic and hydrologic analyses (HYDRWIN and SWMM), communicating with LDOTD experts on the project's feasibility and technical merit, conducting multiple site visits with LDOTD experts and project staff to clarify project features and existing drainage infrastructure, and facilitating continuous communication with the City's elected representatives about the status of grant process. In the course of this project, an excellent working relationship was forged with LDOTD's SWFCP staff and experts. Significant coordination was required with LDOTD staff due to the unique drainage conditions in the New Orleans area and due to the SWMM models of the city's previous drainage master plan work required to be re-analyzed with LDOTD's HYDRWIN software. The project involved (i) the installation of new subsurface drainage pipes and inlets along three city streets and (ii) the upgrading of existing drainage features with larger subsurface pipes, inlets, and outfall pipes along three other city streets. The subsurface pipes ranged in size from small 18-inch diameter circular pipes to large 54"x88" arch pipes. Adjustment of sanitary sewer house connections, and numerous pavement restoration tasks were included in this project as well. This project

KEY PERSON:

Name & Title:

Jim Wilson, P.E., LEED® AP

Vice-President

required continuous coordination with the DPW staff during this project. Most of the drainage improvements under this project were derived from the previously completed Master Drainage Plan, while the new improvements were compared with the Master Drainage Plan as well to ensure that no conflicts arose.

New Orleans International Airport (MSY) Drainage Pump Station, Kenner, LA

MSMM completed design and EDC services for a 600 cfs stormwater drainage pump station and for all landside drainage as part of constructing a new airport terminal. The project involved working under an extremely compressed schedule while successfully delivering a truly multi-disciplinary effort spanning civil, structural, electrical, mechanical, and environmental engineering, hydraulic modeling, architectural services, cost estimating, environmental permitting, drafting, and agency coordination.

Role: Mr. Wilson was the lead civil engineer and designer of record for the project. He designed all the civil site work, provided engineering support during the advertisement (EDA) and construction (EDC), and provided periodic inspection reports of the construction progress.

Aubry Street CDBG 10-Year Storm Drainage Improvement Roadway Construction, New Orleans, LA.

For this full reconstruction project, MSMM performed civil design engineering services for the roadway, sidewalks, driveway aprons, and sewer. MSMM was also tasked with developing the H&H model (using HYDRWIN) to calculate drainage characteristics within the project area. This information was compared with the capacity of existing drainage infrastructure to develop recommendations for upgrades to the drainage in the neighborhood. MSMM also performed utility research to identify conflicts and found that a 50-inch water line crossed the project area with below-average cover (3 ft.). The waterline relocation was approved for the project scope and approved in a new location through a mapping and drafting effort. MSMM completed the plans and specifications, provided bidding phase services and construction management services, and performed the Resident Inspection for the project.

Role: Mr. Wilson was the designer of record for the project.

River Road Aquatic Ecosystem Restoration, San Antonio, TX

MSMM was contracted by USACE/San Antonio River Authority to provide 100% Design-Bid-Build for this large-scale project, which focuses on recreational usability and ecosystem restoration. MSMM's responsibilities include H&H analysis, stream restoration, landscape architecture, civil and structural design, cost estimating, and value engineering.

Role: Mr. Wilson is the project manager on this project.

TEC Professional Services Questionnaire

SPECIALIST:

Name & Title:

Scott Chehardy, P.E.

Project Assignment:

Civil Engineer

Name of Firm with which associated:

MSMM
ENGINEERING, LLC

Years' experience with this Firm:

9 (2015)

Education: Degree(s)/Year/Specialization:

B.S. in Civil Engineering, 1994, University of Southwestern LA

Active registration: Year first registered/discipline:

Year First Registered: 1998

Discipline: Civil State: Louisiana License No.: 28532

Also registered in Indiana (11700829)

Other experiences and qualifications relevant to the proposed Project:

Mr. Chehardy has nearly three decades of civil design and hydraulic evaluation experience in Louisiana's coastal Parishes. He has successfully designed levees and floodwalls, pump stations and force mains, and canals and box culverts. His design and assessment experience spans levee and floodwall, roadway, water, sewer and drainage infrastructure elements. He has been an integral part of the study and design of the new 600 cfs drainage pump station in New Orleans International Airport, drainage study of Canal No. 17, Canal No. 7, and Parish Line Pump Station in Jefferson Parish, East Bank Subsurface Drainage Improvement Program in Jefferson Parish, Sewerage & Water Board of New Orleans' SELA Urban Flood Control Projects (Claiborne Avenue Manifold Canal and South Claiborne Avenue Canal II), Hurricane Katrina Related Water Restoration Projects for S&WBNO, etc. Mr. Chehardy's levee design work included West Bank & Vicinity, Lake Cataouatche Pumping Station to Segnette State Park, Phase 2, First Lift. of a 20,250 linear foot segment of the hurricane protection system (\$41.3 M), West Bank & Vicinity, Algiers Canal Levee West, Algiers Lock to Hwy. 23, Orleans & Plaquemines Parish (EAR \$230M to \$425M), and West Bank & Vicinity, Phase 2 Hurricane Protection, Algiers Canal (East), Hero Levee to Highway 23, WBV-49.2, Plaquemines Parish, LA (EAR \$474M to \$558M). Mr. Chehardy's responsibilities have included project management, design, permitting, and quality control.

Cow Bayou Drainage Pump Station Complex, Orange, TX

The preliminary design phase was a joint engineering effort between USACE New Orleans District, Galveston District, and MSMM. MSMM's design responsibilities included structural design, architectural design, civil site work, geotechnical evaluation and design, cost estimating, CAD drafting, and project management. MSMM was an integrated design team with New Orleans District, who provided mechanical and electrical design, while MSMM coordinated this mechanical and electrical design with the civil, structural, and geotechnical

SPECIALIST:

Name & Title:

Scott Chehardy, P.E.

engineering design.

Project features being designed by MSMM include dolphin structures, a pump station safe house, a fuel farm, and access roads. MSMM designed the project in MicroStation 3D and Civil 3D, also utilizing Revit BIM 3D modeling and CIM modeling for the facilities. MSMM engineers also designed permanent project structures associated with the pump station, including the horizontal and vertical pump intake and discharge structures, engine and pump support slabs, fuel tank foundation/containment, water tank foundation, west access bridge, and exterior semi-gantry and overhead bridge crane supports. The pump station and two-story safe house were designed utilizing STAAD software. MSMM's civil engineers provided the wastewater treatment facility design, layout of the entry roadways and parking lots, and the site grading and utility layout in compliance with UFC-201-01. Project Management included preparing a detailed communication plan which outlined procedures for coordination of activities and addressed scheduling, communication distribution structure, information collection and filing procedures, and a flow chart of personnel and project progression.

Role: Mr. Chehardy managed the Civil, Structural, and Architectural aspects of the project, while USACE led the Electrical and Mechanical aspects. He developed the civil/site work design, developed the utility documentation, prepared the detailed plans and specifications, and coordinated the development of the DDR.

Kennedy Heights Sewer Pumpstation Improvements, Jefferson Parish, LA

MSMM is assisting Jefferson Parish in developing pump station improvements to the Kennedy Heights station on the West Bank. MSMM is evaluating the current state of the station, reviewing the as-built documentation and determining the best/most cost-efficient method to rehabilitate the station. Mr. Chehardy is leading the MSMM design efforts and is currently working on finalizing the preliminary design documentation.

Role: Civil Design, Engineer of Record

City of Baton Rouge/Parish of East Baton Rouge System Analysis, Current Condition Evaluation and Rehabilitation Recommendation for Non-SSO Program Sewer Pump Stations, Baton Rouge, LA

The City of Baton Rouge/Parish of East Baton Rouge (C-P) has undertaken a comprehensive rehabilitation program for the portions of its sanitary sewer infrastructure that are plagued with chronic Sewer Sanitary Overflow (SSO) problems. In addition, the C-P was also suffering from severe reduction in functionality and associated increase in Operation & Maintenance costs in several sewer pump stations.

MSMM performed the evaluation, construction recommendation, design and construction administration on 15 pump stations that fall within the SSO program. MSMM evaluated pump curves, spreadsheets of pump station characteristics, pump station data from survey and GIS. We compared this data with previously available data on subject pump stations, identified conflicting data, and worked toward a common consensus with the project sponsors about the main issues for each pump station. MSMM submitted design packages for each of the identified pump stations.

Role: Engineer of Record, Engineering Manager

TEC Professional Services Questionnaire

INDIVIDUAL CONSULTANT:
Name & Title:
Chris Mills, PE Civil Engineer and Project Manager
Project Assignment:
Civil Engineer and Project Manager
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
5 (2019)
Education: Degree(s)/Year/Specialization:
BS in Civil Engineering, 2019, Louisiana State University
Active registration: Year first registered/discipline:
Year First Registered: 2023 Discipline: <u>Civil (PE)</u> State: <u>Louisiana</u> License No.: 47987
Other experiences and qualifications relevant to the proposed Project:
<p>Mr. Mills has worked with MSMM for 5 years, emerging as a crucial component of our firm's municipal design projects. Mr. Mills is a talented professional engineer with experience designing over 20 municipal projects in Southeast Louisiana. His experience includes hydraulic modeling, general civil schematic design, engineering studies, marine infrastructure design, drainage channel revitalization, and pump station design. His referenced general civil design experience includes calculations and schematic design for drainage, water, sewer, and roadway infrastructure. He also served in a construction administration role for various design projects, meticulously managing construction to ensure that all work performed adhered to the design plans, specifications, and local ordinances. His proactive, collaborative, and accessible approach guarantees that each project meets the highest standards of quality and compliance, reflecting his commitment to excellence in every aspect of his work.</p> <p><u>East Bank Master Drainage Plan Development – Jefferson Parish, LA</u></p> <p>MSMM was contracted by Jefferson Parish to update the 2015 version of the East Bank Master Drainage Plan. MSMM's scope included the input of all major drainage projects (approximately 11 projects) throughout the Parish since 2015 into the SWMM model. Additionally, MSMM was tasked with analyzing the results of the 10-Year storm event for "high water conditions" in the conduits throughout Jefferson Parish. The WSE of the conduit was compared to the surrounding ground elevations to determine overburdened conduits. cursory explanations for the high-water events were then prepared to develop a priority scale for future work</p> <p>Role: Mr. Mills was lead engineer for the project, providing his professional analysis, reason, and judgement in a report provided to Jefferson Parish</p>

INDIVIDUAL CONSULTANT:

Name & Title:

Chris Mills, PE

Civil Engineer and Project Manager

Bucktown Marina Transient Boat Dock Design, Metairie, LA

Mr. Mills served as Project Manager and Engineer of Record for the Bucktown Marina Boat Dock design project. The project involved the creation of a transient boat dock and service area. This area features an L-shaped, transient, and flexible dock, specifically designed for accommodating the commercial fishing fleet. He utilized Permatrac technology for composite concrete decking, ensuring a highly durable surface. The transient dock is comprised of a composite wood non-slip surface, prioritizing safety. His work encompassed the installation of piles, dredging operations, construction of a parking lot and walkway, as well as obtaining the necessary permits. This included securing a permits from DNR, CPRA, USACE, and the Levee Board.

Role: Mr. Mills served as Project Manager and Engineer of Record.

Sankofa Silver Jackets- New Orleans, LA

MSMM was contracted by USACE New Orleans district to develop a SWMM model for the Sankofa Wetland Park. During the Phase I modeling effort of the Sankofa Wetland Park, it was discovered that the water levels in the Sankofa wetland pond are directly tied to the neighboring St. Bernard Parish storm drainage canal system. Phase II of the modeling effort involves connecting the St Bernard Parish model with the Lower Ninth Ward/Sankofa Wetlands Model. Additionally required is the analysis of the rain records versus the water-body stage-record data for the most recent rain data as well as incorporating proposed control structure and pumping operation parameters into the SWMM model to provide predictive outcomes of proposed action items.

Role: Mr. Mills is the Project Management for Phase II of the modeling effort. Mr. Mills is responsible for the modeling, analysis, and final considerations for the project.

Lincoln Manor Subdivision Drainage Improvements, Kenner, LA

MSMM Engineering was tasked by the City of Kenner to provide professional services for the Lincoln Manor Subdivision Drainage Improvements Project. This project encompasses engineering design, bidding, resident inspection, and construction administration. The primary focus of the project is to enhance the drainage infrastructure along Tifton Street, Ohio Avenue, Dawson Street, and Utah Street, specifically targeting the drainage outfalls leading to Canal No. 13. The scope includes upsizing the drain lines, installing new drainage structures, and removal and replacement of roadways, driveways, and sidewalks as necessary to accommodate the new drainage improvements.

Role: Mr. Mills provided design and construction administration services including engineering project plans, producing project specifications and estimating project cost.

Aubry Street CDBG 10-Year Storm Drainage Improvements and Roadway Construction, New Orleans, LA

MSMM completed design of drainage and concrete full depth reconstruction of Aubry St. in the Gentilly neighborhood. The (4) block project included drainage improvements for a 10-year storm, the use of permeable pavement for sidewalks and new utilities for the entire reach. MSMM also performed construction management and resident inspection.

Role: Mr. Mills was responsible for utilities, drainage, and green infrastructure design.

TEC Professional Services Questionnaire

INDIVIDUAL CONSULTANT:
Name & Title:
Stuart Seiler, PE, PMP Civil Engineer and Project Manager
Project Assignment:
Civil Engineer and Project Manager
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
1 (2024)
Education: Degree(s)/Year/Specialization:
BS in Civil Engineering, 2016, Louisiana State University
Active registration: Year first registered/discipline:
Year First Registered: 2020 Professional Engineer- Discipline: <u>Civil</u> State: <u>Louisiana</u> License No.: 45472 Project Management Professional (PMP)- 2024- License No.: 3839836
Other experiences and qualifications relevant to the proposed Project:
<p>Mr. Seiler is a licensed Professional Civil Engineer (PE) and Project Management Professional (PMP) with extensive experience spanning both public and private sectors. His career encompasses civil design, program management, project management, and construction management. In the private industry, Mr. Seiler has designed design civil projects including roadways, water systems, sewer systems, civil facilities, and utility conflict resolution across multiple Parishes and municipalities in Louisiana. On the public sector front, he has managed the design and construction of over 1,250 blocks amounting to \$150 million for the Department of Public Works. This hands-on experience has deepened his understanding of program implementation, procurement, and public bid law. Notably, Mr. Seiler has represented the New Orleans Department of Public Works in Louisiana's legislative sessions, advocating for municipalities' interests on proposed amendments to Statute RS38:2212 M(5).</p> <p><u>Department of Public Works Catch Basin Cleanout Citywide project, New Orleans, LA</u></p> <p>After Hurricane IDA, the City of New Orleans received funding for a catch basin cleanout program as part of relief efforts. This program mandated the cleaning of every catch basin in the city along with over 500 drain lines within a constrained timeframe. Recognizing the urgency and complexity of the program, the Department of Public Works (DPW) determined that a structured approach was necessary. Consequently, DPW developed a comprehensive bidding package that outlined the scope of work, deliverables, deadlines, and segmented the catch basins into manageable task orders. Mr. Seiler was entrusted as Program Manager with the responsibility of conceptualizing, implementing, and overseeing the execution of this critical program.</p> <p>Role: Mr. Seiler was the Program Manager for Department of Public Works, New Orleans</p>

INDIVIDUAL CONSULTANT:

Name & Title:

Stuart Seiler, PE, PMP
Civil Engineer and Project Manager

Westside Creeks Restoration Project, San Antonio, TX

MSMM was contracted by USACE's Fort Worth District for the ecosystem restoration and recreation for Martinez Creek, a tributary along the western side of San Antonio River mainstream. The purpose of the project is to restore the Riverine Ecosystem, adding pedestrian facilities, and maintain the channel's flood storage and hydraulic operation. Due to the added features, existing and projected drainage modeling are a vital component of the project. After every design consideration, a new drainage model is required to measure how the component effected the hydraulic operation of the channel, thus making this project an iteration design. Additionally, Martinez creek has 17 locations identified for required outfall structures designed to flow under the proposed pedestrian shared use path.

Role: Mr. Seiler was responsible for designing each unique concrete outfall structures.

USACE Silver Jackets, Stormwater Watershed Management Study, New Orleans, LA

MSMM was contracted by USACE's New Orleans District, to assess flood conditions in New Orleans East. The purpose of this project was to assess how flood stages will be affected by projected changes in future rain and sea-level conditions and recommend strategies for mitigating increased flood loss damages. MSMM performed the hydraulic modeling utilizing the EPA SWMM model to determine the existing and future conditions on over 50 percent of the Parish inside the levees for the 10-year, 25-year, and 100-year storm events.

Role: Mr. Seiler performed the hydraulic modeling performed on the project.

Little Woods (RR100) Neighborhood FEMA Recovery Roads Repair, New Orleans, LA

At the Department of Public Works, Mr. Seiler was the Project Manager for the +200 block RR100 Little Woods FEMA Recovery Program project, responsible for managing construction and representing the City's interest during the construction phase of the project. General design features included mill and overlay, complete roadway replacement, ADA-compliant ramps at intersections, traffic engineering for intersections, and design of new sub-surface utilities, including drainage, sewer, and water infrastructure. Mr. Seiler was also responsible for coordinating with Entergy, Cox, and AT&T to mitigate utility conflicts.

Role: Mr. Seiler was the Project Manager at Department of Public Works, New Orleans.

Wastewater Treatment Collection System 5 MG Ground Storage Tank and Pump Station, Baton Rouge, LA

As part of the USACE New Orleans District Environmental Infrastructure Program, MSMM provided the engineering design of two piles supported above-ground 5 million gallons (MG) prestressed concrete storage tanks, a 14,000gpm sewer pump station, and a CMU control building. The existing pump station will be connected to the new pump station with a 42" diameter pipe and overflow chamber with automatic slide gates to control when flows will be diverted. Additional design features include two large in-ground control valve junction boxes and concrete paved access roads around the tanks.

Role: Mr. Seiler's responsibilities include project management, pump station design, and sizing of gravity sewer piping and force mains.

TEC Professional Services Questionnaire

PROFESSIONAL IN CHARGE OF PROJECT:
Name & Title:
Marty Tittlebaum, Ph.D., P.E. Project Engineer, QA/QC
Project Assignment:
Environmental Engineer
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
9 (2013)
Education: Degree(s)/Year/Specialization:
Ph.D. in Environmental Engineering, 1979, University of Louisville ME in Environmental Engineering, 1972, University of Louisville BE in Civil Engineering, 1971, University of Louisville
Active registration: Year first registered/discipline:
Year First Registered: 1980 Discipline: <u>Civil & Environmental</u> State: <u>Louisiana</u> License No.: <u>18997</u> <i>Also registered in Kentucky (9563)</i>
Other experiences and qualifications relevant to the proposed Project:
<p>Marty E. Tittlebaum, the past Edward G. Schlieder Chair for Urban Waste Management and Research and Professor of Civil and Environmental Engineering, possesses expertise in the areas of hazardous and industrial waste remediation, environmental permitting and environmental engineering research and project management, water and wastewater treatment and reuse, resource recovery, and hazardous waste management. Dr. Tittlebaum has received over \$8 million in state, national and international research funding, written over 75 refereed technical journal articles and been an invited lecturer of over 100 papers. Dr. Tittlebaum has served on several technical advisory panels, including the U.S Corps of Engineers hazardous waste evaluation program.</p> <p>At MSMM, Mr. Tittlebaum serves as our Principal Quality Control Engineer, and he reviews all design products. He is also responsible for leading all of our environmental permitting activities and has an excellent working relationship with all of the permitting agencies.</p> <p><u>New Orleans International Airport (MSY) Drainage Pump Station, Kenner, LA</u></p> <p>MSMM completed design and EDC services for a 600 cfs stormwater drainage pump station and for all landside drainage as part of constructing a new airport terminal. The project involved working under an extremely compressed schedule, while successfully delivering a true multi-disciplinary effort spanning various engineering disciplines, hydraulic modeling, architectural services, cost estimating, environmental permitting, drafting, and agency coordination.</p> <p>Role: Dr. Tittlebaum provided the quality control design for the project. He reviewed all design submittals for</p>

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Marty Tittlebaum, Ph.D., P.E.

Project Engineer, QA/QC

accuracy/consistency and provided design comments to our engineering team prior to design submissions to the airport and the FAA.

Cow Bayou Drainage Pump Station Complex, Orange, TX

The preliminary design phase was a joint engineering effort between USACE New Orleans District, Galveston District, and MSMM. MSMM's design responsibilities included structural design, architectural design, civil site work, geotechnical evaluation and design, cost estimating, CAD drafting, and project management. MSMM was an integrated design team with New Orleans District, who provided mechanical and electrical design, while MSMM coordinated this mechanical and electrical design with the civil, structural, and geotechnical engineering design.

Project features being designed by MSMM include dolphin structures, a pump station safe house, a fuel farm, and access roads. MSMM designed the project in MicroStation 3D and Civil 3D, also utilizing Revit BIM 3D modeling and CIM modeling for the facilities. MSMM engineers also designed permanent project structures associated with the pump station, including the horizontal and vertical pump intake and discharge structures, engine and pump support slabs, fuel tank foundation/containment, water tank foundation, west access bridge, and exterior semi-gantry and overhead bridge crane supports. The pump station and two-story safe house were designed utilizing STAAD software. MSMM's civil engineers provided the wastewater treatment facility design, layout of the entry roadways and parking lots, and the site grading and utility layout in compliance with UFC-201-01. Project Management included preparing a detailed communication plan which outlined procedures for coordination of activities and addressed scheduling, communication distribution structure, information collection and filing procedures, and a flow chart of personnel and project progression.

Role: Dr. Tittlebaum is providing quality control design for the project. He is tasked with reviewing all design products before they are submitted to USACE.

Sankofa Silver Jackets- New Orleans, LA

MSMM was contracted by USACE New Orleans district to develop a SWMM model for the Sankofa Wetland Park. During the Phase I modeling effort of the Sankofa Wetland Park, it was discovered that the water levels in the Sankofa wetland pond are directly tied to the neighboring St. Bernard Parish storm drainage canal system. Phase II of the modeling effort involves connecting the St Bernard Parish model with the Lower Ninth Ward/Sankofa Wetlands Model. Additionally required is the analysis of the rain records versus the water-body stage-record data for the most recent rain data as well as incorporating proposed control structure and pumping operation parameters into the SWMM model to provide predictive outcomes of proposed action items.

Role: Dr. Tittlebaum will provide the water quality analysis for the project.

TEC Professional Services Questionnaire

KEY PERSON:

Name & Title:

Jeff Wilson, P.E.

Civil Engineer

Project Assignment:

Civil Engineer

Name of Firm with which associated:

MSMM
ENGINEERING, LLC

Years' experience with this Firm:

1 (2023)

Education: Degree(s)/Year/Specialization:

B.S. in Civil Engineering, 1988, University of New Orleans
Coastal Engineering Certificate, 2014, Old Dominion University

Active registration: Year first registered/discipline:

Year First Registered: 1992

Discipline: Civil State: Louisiana License No.: 16581

Also registered in Mississippi (31566)

Other experiences and qualifications relevant to the proposed Project:

Mr. Wilson brings 27 years of experience designing and managing land and marine infrastructure projects to this project. These projects covered a wide spectrum of work from roadway improvements to hydraulic studies and the design of commercial and residential sites. In addition to a design background in roadways, drainage, and utilities, Mr. Wilson has experience with marine construction. He was employed as a diving professional for over 12 years, with experience in the offshore Oil and Gas industry. Mr. Wilson is an active member of the American Society for Civil Engineers (ASCE) and the American Concrete Institute (ACI). He is proficient in EPA SWMM, HEC-RAS, Arcview GIS Software, and the LADOTD Hydraulics software.

Port of New Orleans Hydraulic and Hydrologic Drainage Evaluation

The overall scope of this project involved H&H model setup and calibration, proposing high level development drainage improvements, and development of a preliminary drainage report. MSMM developed multiple SWMM models, which were then used to determine 2, 5, 10-, 25-, 50-, and 100-year events. We also collected aerial and LiDAR data, as well as historic storm hydrologic and hydraulic models to identify H&H feature characteristics for stormwater management.

Role: Mr. Wilson was the project manager on this project. His contribution included liaison with the prime consultant and preparing a drainage study for the Owners using information from historical records. He also assisted in preparing the drainage model and evaluation.

Freret Group A - Design and Construction Management of Roadway, Drainage and Water Improvements/Restoration, New Orleans, LA

The project consisted of water and drainage repairs and improvements, followed by the rebuilding of streets in

KEY PERSON:
Name & Title:
Jeff Wilson, P.E. Civil Engineer
<p>the area bounded by Napoleon Ave., Jefferson Ave., Claiborne Ave., and Lasalle St. It involved overlay, complete road reconstruction, and the repair or upgrading of water and drain lines. This was for approximately a 36-block area, where about 1/3 of streets were repaired or replaced.</p> <p>Role: As the designer and construction administrator with Kyle Associates, LLC, Mr. Wilson was responsible for creating the design concept and detailed plans for the project in addition to overseeing the construction phase to ensure the design was accurately executed.</p>



Jefferson
Parish
State of Louisiana

TEC Professional Services Questionnaire

INDIVIDUAL CONSULTANT:
Name & Title:
Eric M. Curson Design Manager
Project Assignment:
GIS Specialist GIS/CADD
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
9 (2015)
Education: Degree(s)/Year/Specialization:
Associates: Southeastern College of Technology Some Classes: Purdue University
Active registration: Year first registered/discipline:
N/A
Other experiences and qualifications relevant to the proposed Project:
<p>Eric Curson is a GIS Specialist, geospatial, and CAD manager at MSMM, where his project experience encompasses a variety of geospatial and software initiatives within the Federal and local market in southeast Louisiana. Mr. Curson has worked extensively on projects that require the use of ESRI ArcGIS and Microsoft SQL Server for Federal clients including the USACE New Orleans District. He has been instrumental in leading the GIS database creation and management for several MSMM projects including the Jefferson Parish I&I project, and the Chitimacha and Ascension Parish GIS planning tool initiatives. With a background in both CAD and GIS, Mr. Curson understands the similarities and differences between the two systems and has played an important role in working through any conversion issues that have arisen through the digitization and database creation process. As the lead drafter at MSMM, Mr. Curson has been instrumental in the development of project plans, working in conjunction with the engineering staff to finalize all submittals.</p> <p><u>Coventry Court Drainage Evaluation Feasibility Report, Jefferson Parish, LA</u></p> <p>In early 2017, following repetitive street flooding in the Coventry Court area of River Ridge, MSMM Engineering worked with the Jefferson Parish District 2 office to propose a solution to the flooding issues in the area. The MSMM engineering team identified several potential options that could be evaluated. In 2018, the Jefferson Parish Council tasked our staff with developing a multi-phase feasibility report to evaluate several drainage solutions in the area.</p> <p>As part of the Coventry Court evaluation, the Jefferson Parish drainage department requested that MSMM investigate and determine the feasibility of providing improved drainage. The investigation consisted of the following:</p> <ul style="list-style-type: none">- Evaluation Phase/Data Review – collection and analysis of existing information

INDIVIDUAL CONSULTANT:

Name & Title:

Eric M. Curson

Design Manager

- Field Reconnaissance and Preliminary Survey – collection of relevant field information
- Model Runs and Calibration – updated the HEC-RAS model with the area's data for 10-year, 50-year and 100-year storm events.
- Cost Estimating of Multiple Alternatives – provided detailed cost breakouts consisting of vendor furnished pricing data for materials
- Development of a Prioritized List of Recommendations – the alternatives developed were prioritized based on our engineering recommendations.

MSMM is the only entity to envision and develop the Coventry Court drainage pump station concept. The final report was completed in less than 6 months, and the final recommendation is to design a new drainage pump station on a vacant parcel owned by the parish between Coventry Court and Lee Court, westerly of Jefferson Highway. This 90 cfs (120 cfs ultimate) pump station with a 48' open cut discharge forcemain placed down Colonial Heights Road and over the Mississippi River levee. Other project features consist of a discharge dolphin in the Mississippi River and upsizing of the Jefferson Highway drainage crossings and downstream conveyance. This recommended alternative provides the greatest pumping capacity while requiring the least amount of permanent drainage servitudes.

Role: Mr. Curson worked with the civil and hydraulic engineering staff to develop GIS shapefiles for inclusion into the model. He also mobilized to the field identifying catch basins, inlets, manholes and other drainage features, which he grabbed coordinates for and uploaded into the model. Finally, Mr. Curson developed project alternatives in GIS and provided conceptual level design in CAD.

Clearview Drainage Pump Station, St. Peter's Ditch Improvements – Phase 4, Jefferson Parish, LA.

MSMM engineering staff provided complete design services for a 220 cfs drainage pump station located within the DOTD Right-of-Way of the Clearview Parkway/Earhart Expressway interchange. The goal of this pump station was to pump stormwater runoff from the existing detention pond network, over Cross Canal, and discharge directly into the improved St. Peter's Ditch (box culvert). The project required multiple disciplines including civil, structural, electrical and mechanical engineering, as well as, cost estimating and drafting (CAD). The pump station structure contained three 75 cfs vertical lift pumps with 250 HP motors and several hundred feet of 36" discharge piping. Additional features of the project included a pile supported reinforced concrete structure, sheetpile intake area, trash rake with conveyor, conditioned control building, generator, traffic detour plan, discharge pipe aerial canal crossing, utility relocations, and other related improvements.

Mr. Curson was the lead CAD designer for the project. He worked with civil, structural, electrical and mechanical engineers to develop the project design and supply of all drawings.

TEC Professional Services Questionnaire

INDIVIDUAL CONSULTANT:
Name & Title:
Binh Le Engineering Technician
Project Assignment:
CADD and BIM/CIM
Name of Firm with which associated:
MSMM ENGINEERING, LLC
Years' experience with this Firm:
1 (2023)
Education: Degree(s)/Year/Specialization:
Bachelor's in Architecture, 1979, University of Saigon
Active registration: Year first registered/discipline:
N/A
Other experiences and qualifications relevant to the proposed Project:
<p>Mr. Le is an Engineer Technician and BIM/CIM Modeler who has spent 43 years specializing in highway projects, architectural projects, and structural projects. His relevant expertise includes collecting information, preparing site plans, and organizing design variables/documents for the EOR on various infrastructure such as floodwalls and levees, pump stations, sewer treatment plants, drainage plans, and landscaping details. He has worked on major local interstate, bridge, renovation, and flood protection projects and has extensive experience in AUTOCAD major, REVIT, Autodesk BIM, Twinmotion, and MicroStation.</p> <p><u>River Road Aquatic Ecosystem Restoration- San Antonio, TX</u></p> <p>MSMM was contracted by USACE/San Antonio River Authority to provide 100% Design-Bid-Build of this large-scale project, which focused on recreational usability as well as ecosystem restoration. MSMM's responsibilities included H&H analysis, stream restoration, landscape architecture, civil and structural design, cost estimating, and value engineering.</p> <p>Role: Mr. Le provided engineering tech services to the design team. He utilized google earth to search for potential obstructions and organized the project files accordingly. He was also the BIM/CIM for the project, creating models for bird-watching platforms, water features, and Fishing Piers using Autodesk BIM software.</p> <p><u>Woodlake Estates/Seton Park Subdivision Drainage Pump Station, Jefferson Parish, LA</u></p> <p>MSMM was tasked by the Jefferson Parish Council to evaluate drainage pump station alternatives to solve the issue of long-term flooding within the Woodlake and Seton Park neighborhoods within the City of Kenner. In 2018, MSMM completed a feasibility study that developed multiple drainage pump station alternatives that bypass the capacity limitations of the canals and alleviate stormwater flooding in the area. At the completion of the feasibility report, the following alternatives were identified:</p>

INDIVIDUAL CONSULTANT:
Name & Title:
Binh Le Engineering Technician
<ul style="list-style-type: none">- A new drainage pump station at the corner of Canal 17 and Canal 7 (west end of Joe Yenni Blvd.), a discharge forcemain westwards, with a discharge basin in the West Return Canal.- A new drainage pump station at the northeast corner of Vintage Drive and Platt Street on Canal 17, a discharge forcemain westwards, with a discharge basin in the West Return Canal.- A new inline drainage pump station at or near the corner of Canal 17 and Canal 7 with discharge into the canals and also with a discharge forcemain westwards to a discharge basin in the West Return Canal <p>Mr. Le worked with the civil and hydraulic engineering staff to develop GIS shapefiles for inclusion in the model. He also mobilized to the field to identify catch basins, inlets, manholes, and other drainage features, for which he grabbed coordinates and uploaded them into the model. Finally, Mr. Le developed project alternatives in GIS and provided conceptual-level design in CAD.</p>



TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 01

Project Name, Location and Owner's contact information:

Woodlake Drainage Pump Station, Hydraulic Modeling and Preliminary Design, Kenner, LA

Jefferson Parish Drainage Department

**Mitch Theriot, PE – Drainage Director
(504) 736-6751**



Nature of Firm's Responsibility:

The Woodland Estates & Seton Park subdivision areas are located at the confluence of Canal 7 and Canal 17 in Kenner. The current drainage system consists of an enclosed gravity storm sewer system that outlets at various locations in the canals. The distance the stormwater within the canal must travel before it is pumped is excessive (nearly 2 miles to the Duncan Canal Pump Station and 2.25 miles to the Parish Line Pump Station). Due to the excessive distance, the water within the canal typically backs up, creating an increased head situation where the gravity drainage pipes are unable to discharge as intended. This generates a backwater flow condition, which causes repeated flooding in the area. Because of the existing conditions in the area, MSMM completed a drainage evaluation report that evaluated options for removing the backflow condition in this area.

MSMM is currently in the process of designing this project to the 65% stage as follows: a 120 CFS pump station located in Seton Park as well as a below ground retention feature within Seton Park to capture peak flows. The retention area within the park will consist of a below ground HDPE piping network covering a roughly 75x300 ft. area fed by an overflow junction box. The pump station will be fed from a 60" drain pipe on St. Elizabeth Drive. The two 60" diameter pipes crossing Platt Street and Joe Yenni Blvd to discharge into Canal 7 and 17 would be interconnected to feed the intake of the pump station. Both 60" pipes would be fitted with flapper type gates so that low flows or flows exceeding the pump station capacity could bypass into the canal. The pump station would utilize three pumps and a single 48" force main to discharge the storm water over the West Return Wall. The force main would be approximately 1,200 linear feet and discharge the storm water over the West Return Canal Levee Wall and into the West Return Canal (part of the Lake Pontchartrain drainage system).

The subsurface drainage was modeled using the US EPA Storm Water Management Model (SWMM), and the canals and pump station utilized the River Analysis System (HEC-RAS) software. The HEC-RAS model conducted existing conditions and other simulations under design storms of 10-year, 50-year, and 100-year intensities. The resulting conditions were utilized for comparison purposes. The alternate iterations result in varying degrees of water surface lowering and flooding reduction. Extents of improvement projects, associated cost opinions, and required

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 01

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
	ancillary items such as right-of-way acquisitions, etc., were considered to select the most optimum combination which will provide the most flooding reduction. The modeling process indicated that both the subsurface drainage system and high-water elevations in the canal during a 10-year storm event are contributing to flooding issues in the project area. The recommendation was made to construct an in-line 120 cfs drainage pump station directly benefiting the two neighborhoods, as the pump station will be the new outlet, therefore no longer relying on the canal system. This alternative will indirectly benefit the entire area by removing the runoff created from these subdivisions from entering the canal system, therefore freeing up canal capacity from other areas.	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2024	\$671	\$506

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 02

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>USACE Silver Jackets Program Jefferson Parish Infrastructure and Watershed Master Plan Development</p> <p>USACE New Orleans District</p> <p>Nik Richard, USACE Project Manager 504-862-2411</p> <p>Michelle Gonzales, CFM – Director, Ecosystem and Coastal Management 504-736-6653</p>	<p>MSMM recently developed the Jefferson Parish Watershed Management Master Plan. Development of the Jefferson Parish Watershed Management Master Plan, (WMP) gave MSMM the dual opportunities of assisting parish leadership in developing strategies to prepare the drainage system for future sea level rise and of assisting the parish residents in lowering their flood insurance rates. Working through the US Army Corps of Silver Jackets program, MSMM provided lead assistance in the ongoing process of acquiring National Flood Insurance Program (NFIP) credit for developing the WMP as part of the Community Rating System (CRS). The NFIP considers a WMP to be the result of a hydrologic and hydraulic study of the watershed using a hydrograph approach, examining both existing and future development conditions, and under different management scenarios. For CRS credit it must model at least the 100-year fully developed watershed at a scale sufficient to determine local problems. Utilizing the parish's existing SWMM models, MSMM adjusted input parameters for rising sea levels, changing storm patterns as projected in the NOAA Atlas 14 rain models, and changing development plans as projected in the Jefferson Parish future land use plan. The output from this modeling effort was then quantified in terms of water surface elevation changes. Utilizing modeling results, FEMA CRS guidance criteria, Jefferson Parish planning studies, input from the parish, and MSMM broad experience from previous drainage and flood studies; a series of recommended watershed management strategies were developed. These recommendations ranged from proposed implementation of standard low impact development principles, such as use of permeable pavements and bio-swales, to specific unique recommendations for Jefferson Parish watershed management regarding pump maintenance considerations, generation capacity and levee resiliency planning.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2021	\$180	\$180



TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 03

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lincoln Manor Subdivision Drainage Improvements, Kenner LA</p> <p>City of Kenner</p> <p>Tom Schreiner, P.E, Deputy CAO – PW 504-468-7515</p>	<p>The City of Kenner has recently contracted with MSMM for the necessary drainage improvements for the Lincoln Manor Subdivision in Kenner, LA. Design of new drainage outfalls at Canal No, 13 for Tifton St., Ohio St., and Utah St. are included in the design package, as well as the inclusion of the full restoration of Dawson Street. The improvements for both phases of the project include upsizing the drainage pipes from 15" to 24", adding new drainage structures, and removing and replacing existing roadways, driveways, and sidewalks as a means to upgrade the drainage features. Utility relocations, inclusive of water and sewer, were also required as part of the new design packages.</p> <p>MSMM's scope includes geotechnical, engineering design, construction bidding, resident inspection, and construction administration for this project. As the prime, MSMM is providing full engineering design, which will include a preliminary phase, design phase, bidding phase, and construction phase for specification and drawing productions.</p> <p>During construction, MSMM will be responsible for all resident inspection and construction administration services. This will include reviewing and addressing the project schedule, pay applicants, RFIs, material submittals, and progress meetings. Additionally, we will have an inspector on site at all times to observe all the work done by the contractor. MSMM will review, measure, and record all work completed for the production of daily field reports and verification of adequate traffic and site safety procedures.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2021	\$900	\$180



TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.


PROJECT NO. 04

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>South Kenner Pump to the River Feasibility Study, Kenner, LA</p> <p>Jefferson Parish Drainage Department</p> <p>Mitch Theriot, PE, Director (504) 736-6751</p> 	<p>For this project, MSMM provided key modeling and coordination roles for developing the South Kenner Pump to the River Feasibility Study. Examining the feasibility of the project gave our engineering staff the opportunity to assist Parish leadership in advancing a concept which has been considered a “no-go” strategy in previous studies. Utilizing a knowledge base of the storm drain system and the canal-pump station system that has been developed through years of working with Kenner and the Parish on drainage problems in the area, MSMM was able to leverage their knowledge base and analytical skills to develop a plan that resurrected the Pump to the River (PTR) concept as a viable strategy for decreasing flood stages over a broad area of Kenner and unincorporated Jefferson Parish.</p> <p>The modeling effort for this study involved analysis of the South Kenner EPA SWMM model and performing hydrology and hydraulic analyses utilizing the HEC-HMS and HEC-RAS models approved by FEMA and the Army Corps of Engineers. These models were used to identify runoff volume and storm flood stages expected in the watershed of the Duncan Canal and Soniat Canal. The Harahan Pump-to-the-River system was added to the HEC-RAS “Jefferson East Bank HSDRRS Project Model” so the model would reflect the projected pump conditions that would exist when the Kenner PTR system would be brought online. Rigorous modeling efforts culminated in the finding that a significant area of flooding could be reduced by extending the conveyance system to the larger reach of the Duncan Canal. In terms of value as measured by the cost of canal and pump station per of volume of water removed from the system, the PTR system was found to provide significant economies because of the short distance of conveyance to the river when compared to the long distance and multiple constrictions involved in conveyance to Lake Ponchartrain.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2014	\$150	\$150

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 05

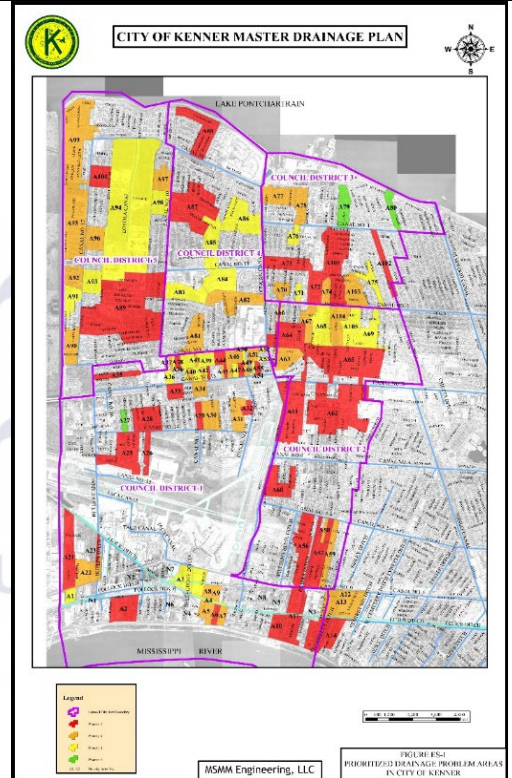
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Coventry Court Drainage Evaluation Feasibility Modeling Report and Subsurface Design River Ridge, LA</p> <p style="text-align: center;">Jefferson Parish Drainage Department</p> <p style="text-align: center;">Mitch Theriot, PE – Drainage Director (504) 736-6751</p> 	<p>In early 2017 and following repetitive street flooding in the Coventry Court area of River Ridge, MSMM Engineering worked with the Jefferson Parish District 2 office to propose a solution to the flooding issues in the area. The MSMM engineering team identified several potential options that could be evaluated, and in 2018 the Jefferson Parish Council tasked our staff with developing a multi-phase feasibility report to evaluate several drainage solutions in the area. As part of the Coventry Court evaluation, the Jefferson Parish drainage department requested that MSMM investigate and determine the feasibility of providing improved drainage. The investigation consisted of the following:</p> <ul style="list-style-type: none"> - Evaluation Phase/Data Review – collection and analysis of existing information - Field Reconnaissance and Preliminary Survey – collection of relevant field information - Model Runs and Calibration – updated the HEC-RAS model with the area's data for 10-year, 50-year and 100-year storm events. - Cost Estimating of Multiple Alternatives – provided detailed cost breakouts consisting of vendor furnished pricing data for materials - Development of a Prioritized List of Recommendations <p>The final report was completed in less than 6 months, and the final recommendation was to design a new drainage pump station on a vacant parcel owned by the parish between Coventry Court and Lee Court, westerly of Jefferson Highway. This 90 cfs (120 cfs ultimate) pump station with a 48' open cut discharge forcemain placed down Colonial Heights Road and over the Mississippi River levee. Other project features consist of a discharge dolphin in the Mississippi River and upsizing of the Jefferson Highway drainage crossings and downstream conveyance. This recommended alternative provides the greatest pumping capacity while requiring the least amount of permanent drainage servitudes.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2018	\$299	\$299

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 06


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Drainage Master Plan Development, Kenner, LA</p> <p>City of Kenner Department of Public Works</p> <p>Tom Schreiner, Director (504) 468-7515</p>	<p>MSMM's principals created the GIS system for the entire City of Kenner subsurface drainage infrastructure that included 304 miles of pipes and culverts, 14,511 individual pipe/culvert segments, and 13,000 drain inlets and catch basins, and managed the database for quick retrieval. As part of developing this information for the Kenner Master Drainage plan project, our staff also characterized the drainage system via field inspections and Hydraulic Modeling utilizing the EPA SWWM. MSMM personnel were previously involved in developing drainage planning documents, inclusive of the City of Kenner Drainage Master Plan completed in April of 2010. Several of the projects identified in that plan were subsequently constructed. However, several drainage projects remained so this report was developed to prioritize recommended subsurface drainage improvement projects on a Council District based by identifying ten (10) highest priority project in each Council District.</p> <p>At the completion of this analysis, the City of Kenner received a compiled report that identified the highest priority projects, along with cost estimates, maps, and recommended drainage piping information. The recommended pipe sizing was based on a ten (10) year storm design standard. The Hydraulic Modeling for this Master Plan update was completed in a similar format to recent Hydraulic Modeling changes performed by Jefferson Parish. The end result was a list of drainage projects that will compete for available funding.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2018	\$120	\$120



TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 07

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>New Orleans International Airport Taxiway Golf and Delta Extension, Kenner, LA</p> <p>New Orleans Aviation Board</p> <p>James McCluskie (504) 464-0831</p> 	<p>MSMM provided extensive hydraulic modeling, engineering design and construction administration services for the extension of Taxiway Golf and Taxiway Bravo at the New Orleans International Airport. Taxiway G will serve the new terminal facility opened on the north side of the airport. In its current condition, Taxiway G does not extend to the Runway 11 threshold, and aircraft departing from Runway 11 are required to cross the active runway at Taxiway A to access Runway 11. Extending Taxiway G will provide much more efficient access to the Runway 11 threshold, and aircraft will no longer be required to cross an active runway to depart from Runway 11. Project design elements MSMM completed/assisted with included the following:</p> <ul style="list-style-type: none"> • Hydraulic Modeling – Design of the storm sewer system was based on the EPA SWMM methodology. Pipes were designed to flow full for the 5-year storm event and to provide one-foot freeboard below the inlet grate for the 10-year storm event for a free outfall condition. Some freeboard exceptions were made in the upper end of the storm sewer where the pipes to be employed by the system are existing and dual flow of storm sewer and ditch may occur along the vehicle service road. Freeboard exceptions will also occur in portions of the median area impounded by Taxiway G, Taxiway Ult. G2, Runway 11-29, and Taxiway Ult. G3 (now Taxiway A) where the existing ground and grates to remain in the system currently do not provide freeboard. Tailwater values at the canal outfalls were based on stage-frequency relationships extracted from the Parish HEC-RAS model. • Drainage Design – Storm drainage design for the medians and infields, a culvert crossing for Taxiway B, channel stabilization design for Canal 15, and adjustments of the Airport Intake Canal to accommodate the vehicle service road relocation. <p>The project was bid in late 2020 and completed construction in 2022, where MSMM performed construction admin services.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2022	\$900	\$900

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 08

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>New Orleans International Airport North Terminal Comprehensive Hydraulic and Hydrologic Modeling Study, Kenner, LA</p> <p>New Orleans Aviation Board</p> <p>Chris Spann, Program Manager (913) 940-1301</p> 	<p>MSMM performed the hydraulic and hydrologic aspect of the North Terminal Expansion Project at the New Orleans International Airport. MSMM adopted the existing hydraulic models such as the 1992 Jefferson Parish UNET model, the 2005 Corps of Engineers HEC-RAS model, and the 2012 Jefferson Parish HEC-RAS model and supplemented them with recent field and record data, creating the new 2013 Airport hydraulic model. From this it was determined the airport would mitigate its peak rate of discharge to include all previous improvements from 1992 to the present. This was commonly known as "Catch-up Mitigation". The difference from the peak runoff from 1992 to the peak runoff from the 2013 conditions as well as the improvements from the North Terminal Expansion were used to size the new drainage pump station along with the drainage conveyance systems for both airside and landside drainage. MSMM worked with airport personnel to determine different mitigation options including on-site pumping, on-site storage or capacity enhancements to Parish owned pumping facilities. MSMM completed a comprehensive analysis of existing as-builts from projects completed at the airport since 1992; completed a field walk-through investigation to inventory existing drainage features; collected data for model calibration; completed a hydrology analysis of the storm sewer system for both the 1992 and 2013 conditions and completed a storm sewer hydraulic grade line analysis. As a result, MSMM prepared numerous Hydraulic and Hydrologic studies including the Phase 1 North Terminal Expansion, Catch-up Mitigation, Phase 2 North Terminal Expansion, Parking Garage Upgrades and the North Wooded Area. MSMM utilized the model to design airside and landside drainage features including more than five miles of drainage piping ranging in sizes from 12" to 72", open channels, box culverts, and the connection to the Butler Canal box culvert, and a new 600 CFS drainage pump station.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2016	\$500	\$500

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 09



Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Mirabeau Garden Stormwater Management and Flood Mitigation Modeling</p> <p style="text-align: center;">City of New Orleans Department of Public Works</p> <p style="text-align: center;">Megan Williams Stormwater Program Manger 504-658-8065</p>	<p>The Mirabeau Gardens Green Infrastructure project involved the intake of water from the Mirabeau trunk line into the project site via a forebay, followed by pumps, vegetated filtration ponds, freshwater swimming pool, woodlands, washes and bioswales, recreational, educational and sports amenities, and eventual discharge into the Mirabeau trunk line. Downstream discharge into Mirabeau trunk line is planned for storms exceeding 10-year intensity, while for all lesser intensity storms, the stormwater will be stored and infiltrated within the site.</p> <p>During the design stage, MSMM conducted hydrologic and hydraulic (H&H) modeling, derived model predicted flood depths, and mapped flooded areas and flood depths. This data was utilized by FEMA to calculate benefit-cost ratio (BCR) of the project. MSMM's H&H model efforts and deliverables proved to be key elements that facilitated BCR of greater than 1.0. Our evaluation utilized both SWMM and HEC-RAS models, reviewed and reconciled the elevation parameters, evaluated the interconnectivity and the numerical model flows between 2 storm sewer systems (DPS03 & DPS04), reviewed information on calibration and model adjustments that were made to derive expected depth of flow in the storm sewers adjacent to the project, SWMM model data, developed stormwater flow rate and volume at multiple drainage nodes around the subject site for 2-year, 5-year, 10-year, and 100-year storms, developed maps of modeled drainage nodes, developed profiles of modeled storm drains, calculated drainage area acreages and prepared maps. We also developed drainage sub-basin delineation maps to facilitate analysis of backwater in the storm drains acting as 'upstream' areas, and relationship of drainage area boundaries to the status of flow within the storm sewer. Based on our modeling efforts, the project was full designed and will be constructed in 2024.</p>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2024	\$900	\$180



TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Statewide Flood Control Program Grant Drainage Improvements, Phase 1, 2, & 3 Kenner, LA</p> <p style="text-align: center;">City of Kenner – Department of Public Works, Jefferson, LA</p> <p style="text-align: center;">Tom Schreiner, Public Works Director 504-468-7515</p>	<p>MSMM personnel led the design, construction management, and resident inspection of multiple phases of the Statewide Flood Control Program (SWFCP) grant drainage improvements in Kenner. LDOTD's Statewide Flood Control Program grant funding was utilized to undertake stormwater drainage system improvements to two neighborhoods (University City and Audubon Place Subdivisions) in the city. The estimated project cost was \$4.57 million, with a grant amount of \$2.7 million. MSMM personnel conducted the project from beginning to conclusion, which included preparing the grant pre-application package, coordinating with the City and LDOTD staff, conducting hydraulic and hydrologic analyses (HYDRWIN and SWMM), preliminary and final design, construction management and resident inspection. Significant coordination was required with LDOTD staff due to the unique drainage conditions and due to the SWMM models of the city's previous drainage master plan work, which required re-analyzation with LDOTD's HYDRWIN software. The project involved installation of new subsurface drainage pipes and inlets along three city streets, and upgrading existing drainage features with larger subsurface pipes, inlets, and outfall pipe along three other city streets. The subsurface pipes ranged in size from small 18-inch diameter circular pipes to large 54" x 88" arch pipes. Adjustment of sanitary sewer house connections, and concrete pavement restoration of the roadways, sidewalks and driveways was also required.</p> <div style="display: flex; justify-content: space-around;">   </div>	
Completion Date (actual or estimated):	Estimated Cost (in thousands):	
	Entire Project	Work for which Firm was Responsible:
2016	\$500	\$500

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
Not Applicable	Not Applicable	Not Applicable

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

MSMM Engineering, LLC (MSMM) is one of the fastest-growing small businesses in the greater New Orleans area. Specializing in drainage infrastructure assessment and design, MSMM offers experienced personnel with an extremely diverse skill set. MSMM engineers total over 150 years of design experience and, combined, have designed over 250 projects for Jefferson Parish. The principals of MSMM alone have designed over two hundred Jefferson Parish projects. We are extremely proficient in providing feasibility/drainage phase, design phase, and construction phase services for drainage infrastructure projects.

1. Professional Training and Experience in Relation to the Type of Work Required for the Engineering Services:

MSMM is currently completing a large-scale Watershed Management Plan for Jefferson Parish that includes extensive watershed modeling. This collaborative effort completed through the USACE New Orleans District is an important dual hatted program for the Parish as it helps identify drainage deficiencies while subsequently providing National Flood Insurance Program criteria for the possibility of benefitting Parish residents. The objective of this FEMA watershed master planning project is to provide Jefferson Parish with a framework to make decisions that will result in decreased losses from flooding. Based on FEMA recommended criteria, the Watershed Management Plan presents an analysis of the existing and future conditions on over 50-percent of the Parish inside the levees for 10-year, 25-year, and 100-year storm events using a hydrograph approach based on EPA SWMM model analysis. SWMM models of the Jefferson East bank Polder and the Catouatche Polder were analyzed individually. The combined area of the two polders exceeded the "inside the levee" area criteria of 50-percent. Comparative future conditions were assessed using Technical Paper 40 versus NOAA Atlas 14 rainfall intensity predictions and using current sea level versus NOAA's 2100 intermediate Sea Level Rise Projection which anticipates a 5.8-foot rise in sea level. Future land use was based on the newly updated Jefferson Parish Edge 2040 land use information. Parish EPA SWMM numerical hydrologic-hydraulic models were used in assessing impacts.

The model analysis indicated that the existing pump system has sufficient capacity to maintain near-present water surfaces despite rising sea levels, but the percent utilization and power usage are increased so that maintenance wear and tear, and power provisions should be considered. Considering storm intensity revisions as standard rain intensities are adjusted from historic Technical Paper 40 intensities to the more current NOAA Atlas 14, the values Jefferson Parish uses for 10- and 25-year storms already exceed NOAA Atlas 14 storm intensities. However, the 100-year NOAA storm is 1.4-inches greater than the Technical Paper 40 value used such that associated water surface impacts should be considered to avoid future revision of the flood plain mapping. The storm water surface impacts due to development in the Catouatche Polder were found to be substantial if the area is built out to the future land use plan without mitigation or canal and pump capacity

upgrades. Based on the findings of the SWMM model analyses, recommendations for future development and redevelopment are addressed to ensure that peak stages for the 10-year, 25-year, and 100-year storm events are not increased.

We are one of the most knowledgeable firms about subsurface drainage in general, and Jefferson Parish drainage in particular. Since the beginning of the SELA program, MSMM's Principal Mr. Manish Mardia has been involved with large scale canal improvement and pump station projects in Jefferson Parish (Harahan Pump to the River, and Soniat Canal improvements). MSMM has modeled, designed, and provided construction inspection and management on several subsurface drainage improvement projects in Kenner (Jefferson Parish), analyzed the entire drainage system of the New Orleans International airport in Jefferson Parish, and conducted complete design of the 600 cfs airport drainage pump station that was recently constructed. The airport drainage work required MSMM to conduct hydraulic modeling, which included the entire east bank of Jefferson Parish, and included recent SELA improvements as well. MSMM's principals also analyzed the entire subsurface drainage system of a prominent Jefferson Parish community (Kenner) through the Woodlake and Seton Park drainage evaluation. We have developed a feasibility study for the community, conducted hydraulic modeling, and applied for a state grant to implement the drainage improvements. Furthermore, Mr. Mardia managed several phases of the Harahan Pump to the River project, and Mr. Chehardy was the designer of record of multiple phases of the project. Mr. Wilson was the designer of record for the Sauv  Road drainage pump station and the new drainage pump station at the airport.

Given the qualifications listed above, our engineering staff are extremely familiar with the region's drainage infrastructure in general, Jefferson Parish's drainage infrastructure, and the soil characteristics that impact design decisions, pose constructability issues, and factor into permitting.

2. Size of Firm, considering number of Professional and Support Personnel Required to Perform the type of Engineering Tasks:

MSMM has a total of twenty-five personnel that will be available to work on this project. Though labeled as a small DBE firm, our modeling and engineering qualifications rival those of larger firms in the region. We were selected by the USACE Ft. Worth and New Orleans Districts for Prime small business contracts to perform A-E Design and Project and Program Management on Federal projects. We have also received a prime engineering design contract by the RTA of New Orleans. Recently in Jefferson Parish, we have primarily provided hydraulic modeling services for various projects. These modeling reports have been widely successful and have been reviewed and approved by top Parish officials.

When beginning any new job, MSMM launches a QA/QC template that assigns personnel based on experience, location, and availability. This plan is developed by the Project Manager and reviewed by the Program Manager before any tasks are executed on the project. MSMM employs a QA/QC manager who not only reviews the quality of the design but engages in forecasting available resources based on the current workload at the company. The QA/QC manager works in unison with the project manager to guarantee that MSMM is providing quality work products and ample capacity to add resources to the job should the scope change during design.

For this project, we envision the standard needs of the program manager, QA/QC manager, and project manager. We will also assign 1 Hydraulic Engineer, 2 Civil Engineers, a CAD drafter, 1 GIS lead, and engineers in training who will be responsible for the management, collection, and dissemination of new field

information that will supply the model with accurate data. The resources available may be too many for the type of work involved, but this is all factored into how MSMM will run the project through our QA/QC plan.

3. Capacity for Timely Completion of Newly Assigned Work, considering the Factors of Type of Engineering Task, Current Unfinished Workload, and Person or Firm's Available Professional and Support Personnel:

MSMM prides itself in completing projects on time and under budget. Since the inception of MSMM, our staff engineers have completed over one hundred design projects, including multiple drainage pump stations (as detailed above). We have also experience utilizing SWMM, HEC-RAS and HEC-HMS models that will be instrumental in the development of this project. Having prior knowledge of running these models for the Parish and meeting deadlines will be critical for any firm. Waiting to win the contract, acquiring the software and training staff will not be a successful strategy for this project, and our staff currently runs these programs daily, and can be seen in the chart below, has ample availability to continue serving the needs of the Parish. Our engineering staff have designed/worked on more than *two hundred projects for various Jefferson Parish departments*. These projects were successfully completed within the identified schedule and met the quality standard Jefferson Parish expects in design performance. The Jefferson Parish references identified in the response to question #7 can attest to the quality standard and timely completion of Parish projects by MSMM and our personnel. Please reach out to them to better understand our firm abilities/accomplishments.

MSMM's current project load allows ample flexibility in our staffing arrangements to ensure that completion of the field and modeling work associated with this project is completed on time and within budget. We recently wrapped up four of our largest design jobs, one being the large drainage pump station at the New Orleans International Airport, and the other three were large design task orders for USACE Ft. Worth where we designed an office building, a roadway and bridge project and a large recreational project. These four jobs encompassed most of our engineering resources over the last 2 years. With these jobs now finished, we have started to allocate our engineering resources to smaller jobs, and they have ample availability in their current schedules for a new project. In addition, the other large design jobs we currently have ongoing for USACE (Cow Bayou Drainage Complex, Ascension Parish Wastewater Treatment Plant, and design for a new floodwall in Texas City, TX) have moved past the preliminary design phase and final design will be completed before the end of the year. Additionally, the larger Jefferson Parish Watershed report has been finalized and provided to the Parish and USACE, so our modeling staff also has ample availability currently.

4. Past Performance by Person of Firm on Parish Contracts:

Our engineering staff have been the designer of record for seven (7) recent drainage pump stations in Jefferson Parish and Texas. Of the recent pump stations completed in Jefferson Parish, our engineering staff were the designer of record for 5 (five of those stations). Mr. Jim Wilson was the designer of record for the recent six hundred cfs drainage pump station at the New Orleans International Airport, as well as the Sauvé Road Drainage Pump Station that was also constructed in River Ridge. Mr. Scott Chehardy was the designer of record for the Clearview Drainage Pump station and for multiple packages of the Harahan Pump to the River project. Mr. Chehardy and Mr. Manish Mardia were also heavily involved in recent updates to the Parish Line Pump Station. As you can see, MSMM is highly qualified to perform the required services for this project and has recent similar project experience that proves our capability to successfully complete this project.

Since the early 1990s, the President of MSMM Engineering, LLC has worked on *more than two hundred*

projects for various departments of Jefferson Parish. Project types designed by MSMM engineering staff include drainage evaluation/pump stations, roads and bridges, stormwater and wastewater system assessment, funding and construction administration, environmental site assessments, permitting and NEPA documentation, and hurricane hazard mitigation design for drainage and sewerage facilities. MSMM's Principals have worked on Jefferson Parish contracts for the past 20 years and have a history of successful project execution starting from grant applications, through environmental permitting and design, to construction administration and grant management. At no point during the 20+ year career of producing project plans and specifications has any member of MSMM been involved in projects involving design inadequacies, cost over-runs or assertions of fault. This statement can be verified by checking with the references listed in the response to Question #5.

A listing of other (not previously covered in this RFQ response) Jefferson Parish projects completed by MSMM engineering staff:

- Utility (Sewer) Relocations – Huey P. Long Bridge Widening
- 31st Street Bridge Replacement
- Hilltop to Quitman Bridge Replacement
- Manhattan Boulevard Rehabilitation from Lapalco to Harvey
- Lapalco Boulevard Widening
- Hickory Avenue (LA-48 to Mounes)
- Harahan Pump to the River, Jefferson Parish, LA
- Soniat Canal Drainage Improvements (USACE/SELA project)
- Drainage Pump Station Design, New Orleans International Airport, Kenner, LA
- Storm Water Demonstration Project, Force Main & East Bank Wastewater Treatment Plant Expansion, Jefferson Parish, LA.
- Sena Drive Drainage Improvements
- Sauvé Road Drainage Improvements
- Canal 7 Drainage Improvements at Chateau Boulevard and Joe Yenni Boulevard
- East Bank Subsurface Drainage Improvement Program Phases I and II
- Drainage Evaluation of Canal Nos. 17 and 7, and Parish Line Pump Station
- Environmental Review for Hurricanes Gustav and Ike CDBG Disaster Recovery grant projects
- Infiltration/Inflow Hydraulic Modeling, Jefferson Parish, LA
- Chetta Drive Gravity Sewer System, Jefferson Parish, LA
- East Bank Water Treatment Plant Expansion, Jefferson Parish, LA
- Wastewater Treatment Plant Modifications, including Sewer Force Main (Tribune to East Bank WWTP), Jefferson Parish, LA
- Sewerage Improvements to the Crown Point Area, Jefferson Parish, LA
- Drainage Design Services for the Long-Term Airport Development, New Orleans International Airport, Kenner, LA

5. Location of Principal Office Where Work Will be Performed:

All work associated with this project will take place out of the MSMM office located at 4508 Clearview Parkway, Metairie, LA 70006.

6. Adversarial Legal Proceedings between the Parish and the Person or Firm Performing Professional Services, in which the Parish prevailed, or any ongoing Proceedings between Parish and the Person or Firm:

MSMM is proud to state that **neither the firm nor our staff have been involved in any litigation activity with Jefferson Parish** or any other client.

7. Prior Successful Completion of Projects of the Type and Nature of the Engineering Services, as Defined, for which firm has Provided Verifiable References:

We offer the following references that can attest to our previous work history regarding hydraulic modeling utilizing SWMM and HEC-RAS modeling, along with the appropriate fieldwork it will require to supply accurate data to the model.

For recent Jefferson Parish drainage projects completed by MSMM inclusive of: Jefferson Parish Watershed Master Planning, Coventry Court Drainage Evaluation, Sauvé Road Drainage Pump Station Design, Woodlake/Seton Park Drainage Evaluation, New Orleans International Airport Drainage Pump Station Design, Kenner Statewide Flood Control Drainage Improvements, Harahan Pump to the River, Clearview Drainage Pump Station, Soniat Canal Drainage Improvements (USACE/SELA project), and Sena Drive Drainage Improvements, we offer the following references:

- **Mitch Theriot, P.E., Director of Drainage Department • Jefferson Parish • 1221 Elmwood Park Blvd., Ste. 907, Jefferson, LA. 70123 • 504-736-6751**
- **Michelle Gonzales, CFM Director of Ecosystem and Coastal Management • Jefferson Parish • 1221 Elmwood Park Blvd., Ste. 310, Jefferson, LA. 70123 • 504-736-6653**
- **Neil Schneider, CCM, P.E., Director of Capital Projects • Jefferson Parish • 1221 Elmwood Park Blvd., Ste. 906, Jefferson, LA. 70123 • 504-736-6833**
- **Walter Krygowski, Deputy Director, and Chief Operations Officer • New Orleans International Airport • 504-303-7551**

For recent projects we have designed that have involved detailed hydraulic modeling, permitting with DOTD, CPRA, the Coast Guard and levee lifts/re-design and bike path/utilities relocation for the USACE New Orleans District:

- **Durund Elzey, Deputy District Engineer for Programs and Project Management (DPM) • US Army Corps of Engineers, New Orleans District • 504-862-1674**

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: 

Print Name: Manish Mardia, PE

Title: President

Date: June 21, 2024

Louisiana Professional Engineering and Land Surveying Board

Hereby Certifies that

MSMM Engineering, Inc.

*has complied with the regulation of this Board and is authorized
to provide or to offer to provide engineering services in the State of
Louisiana contingent upon payment of the annual renewal fee.*

Baton Rouge, Louisiana · 08/15/2011



License Number 4896

Ali Mustafa

Chairman

[Signature]

Secretary


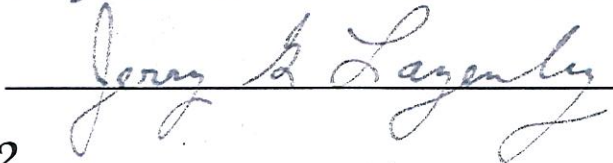
The Louisiana State Board of Registration for Professional Engineers and Land Surveyors

Hereby Certifies that
Manish Mardia

*has qualified before this Board in accordance with law and his name
has been inscribed upon the list of registered Professional Engineers. He
is thereby entitled to practice in the State of Louisiana the profession of
Environmental Engineering
contingent upon payment of the annual license fee provided by law.*



Baton Rouge, La. July 13, 1999


Chairman

Secretary

Registration No. 28482



LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program

This is to certify that under Title 49, Part 26 of the Code of Federal Regulations
& Under the State of Louisiana United Certification Program (LAUCP)

MSMM Engineering, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) in the following specialties:

541690, 541620, 541618, 541611, 541490, 541350, 541340, 541330

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: January 13, 2024- January 13, 2025

This certificate is valid through the above date provided. This firm meets the on-going programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to annual verification and suspension or revocation based upon reasonable cause to believe that the firm is ineligible.

A handwritten signature in blue ink, reading "Keziah L. Cawthorne", is written over a horizontal line.

Keziah L. Cawthorne, DBE Program Administrator II
Regional Transit Authority

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Provision of Routine Engineering Services for

Drainage Projects in Jefferson Parish

SOQ **24-015** | Resolution No. **144202**

B. Firm Name & Address:



Gulf South Engineering and Testing, Inc.

15 Veterans Memorial Boulevard | Kenner LA 70062

C. Name, title, and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Chad M. Poché, P.E., Executive Vice President

504-305-4401 | 504-460-5239 cell | cpoche@gulfsoutheng.com

Registered Professional Civil Engineer (Louisiana No. 27667; since 1998)

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline:

Chad M. Poché, P.E., Executive Vice President

504-305-4401 | 504-460-5239 cell | cpoche@gulfsoutheng.com

Registered Professional Civil Engineer (Louisiana No. 27667; since 1998)

E. Please provide the number of employees whose primary function corresponds with each category:

<u>7</u>	Administrative	<u> </u>	Estimators	<u> </u>	Specification Writers
<u> </u>	Architects (Licensed)	<u> </u>	Geologists	<u> </u>	Structural Engineers
<u> </u>	Chemical Engineers	<u>2</u>	Geotechnical Engineers	<u> </u>	Graduate Engineers
<u> </u>	Civil Engineers	<u> </u>	Interior Designers	<u>1</u>	Project Managers
<u>10</u>	Construction Inspectors	<u> </u>	Landscape Architects	<u> </u>	Clerical (<i>see Administrative</i>)
<u> </u>	Ecologists	<u> </u>	Land Surveyor (<i>Apprentice</i>)	<u> </u>	Grant/Funding Specialist
<u> </u>	Electrical Engineers	<u> </u>	Mechanical Engineers	<u> </u>	Sanitary Engineers
<u> </u>	Engineer Intern	<u> </u>	Environmental Engineers	<u>1</u>	CMT Supervisor
<u>1</u>	Professional Land Surveyors	<u> </u>		<u>1</u>	Construction Svcs Manager
				<u>4</u>	Laboratory Personnel
				<u>3</u>	Soil Boring Personnel
				<u>30</u>	TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES NO X

If marked "no", skip to Section I. If marked "yes", complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.		
1. <div style="text-align: center; font-size: 1.5em;">N/A</div>		
2.		
H. Has this JOINT-VENTURE previously worked together? Please check: <div style="display: flex; justify-content: space-around; margin-top: 10px;"> YES_____ NO_____ N/A </div>		
I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.		
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. <div style="text-align: center; font-size: 1.5em;">N/A</div>		
2.		
3.		
J. Please specify the total number of support personnel that may assist in the completion of the Project: <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 100px; text-align: center; font-size: 1.5em; margin-right: 10px;">30</div> (all personnel will be available for assignment to the project) </div>		

TEC Professional Services Questionnaire

- K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e., résumé) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.**

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Chad M. Poché, P.E.

Executive Vice President / Registered Professional Geotechnical Engineer

Project Assignment:

Geotechnical Engineer / Principal In Charge

Name of Firm with which associated:



ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

Years' experience with this Firm:

13 years (founded Gulf South in 2011);
31 years total (1993)

BFM Corporation, LLC | 2017 to present
Gulf South Engineering and Testing, Inc. | 2011 to present
Ardaman and Associates, Inc. | 2007 to 2011
Eustis Engineering | 1996 to 2001
Soil Testing Engineers, Inc. | 1993 to 1996

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active Registration: Year first registered/discipline:

1998, Civil Engineer (Louisiana No. 27667)
2002, Civil Engineer (Mississippi No. 15405)

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E., is Executive Vice President, co-founder, and a Principal in Gulf South. He has been a consulting geotechnical engineer for nearly 30 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations and serving as an Expert Witness.

TEC Professional Services Questionnaire

Other experience and qualifications: **Chad M. Poché, P.E. (continued)**

Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

N. Sibley Pump Station Improvements, Metairie, Jefferson Parish, LA. Gulf South provided construction materials testing for the project, located at the corner of N. Sibley Street and West Napoleon Avenue. Gulf South's scope of work includes soil density tests, concrete inspection and testing, pile driving, pile load tests monitoring, vibration monitoring, and earthwork testing. (\$20,000 (fee); 2021)

Lake Cataouatche Drainage Pump Station Replacement (Chighizola Lane), Grand Isle, Jefferson Parish, LA. Geotechnical engineering services for the construction of a replacement Lake Cataouatche drainage pump station at the end of Chighizola Lane in Grand Isle. Gulf South's scope includes drilling one undisturbed soil borings to a depth of 80 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Pump station is close to a USACE floodwall so coordination and geotechnical engineering analyses were required to show the new pump station would not adversely affect the integrity of the floodwall. (\$7,500 (fee); 2020)


Metairie Lawn and Ridgelake Drive Roadway & Utility Project, Metairie, Jefferson Parish, LA. Geotechnical engineering services for construction of a new roadway paving and below grade drainage pipeline in Metairie, LA. Gulf South's scope includes drilling five (5) auger borings to a depth of 20 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$8,500 (fee); 2021)

Drainage Improvements, Citrus Road & Greg Court, Metairie, Jefferson Parish, LA. Geotechnical investigation for drainage improvements (2000 lf) along Citrus Road & Greg Court (to Jefferson Highway) in Metairie, LA. Gulf South's scope includes pavement coring and drilling five undisturbed soil borings each to 20 feet below ground surface, lab testing, and engineering analyses (including allowable soil bearing values, bedding and backfill recommendations), estimates of settlement, pavement design recommendations, and general construction recommendations. (\$8,500 (fee); 2017)

Drainage Infrastructure Improvements, South Avondale Subdivision, Avondale, Jefferson Parish, LA. Geotechnical investigation for drainage improvements on S. Jamie Boulevard in Avondale, LA. Gulf South's scope includes drilling five undisturbed soil borings to depths of 20 feet, lab testing, and engineering analyses including allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction procedures and recommendations. (\$7,000 (fee); 2018)

Midway at Soniat Canal Pump Station Elevator Generator Platform (Silver Oak Lane), Harahan, Jefferson Parish, LA. Geotechnical engineering services for the construction of a new elevated generator platform at the Midway Soniat Canal pump station off Silver Oak Lane in Harahan, LA. Gulf South's scope of services includes drilling a single undisturbed soil boring to a depth of 100 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$7,500 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Bryson S. Beard, P.E., ACI Associate Geotechnical Engineer/Field Engineer	
Project Assignment:	
Associate Geotechnical Engineer/Field Engineer	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
2 years (joined Gulf South in 2022); 3 years total (2021)	<i>Gulf South Engineering and Testing, Inc. 2022 to present</i> <i>TetraTech, Inc. 2021 to 2022</i>
Education: Degree(s)/Year/Specialization:	
B.S., Geological Engineering (2021; University of Mississippi)	
Active Registration: Year first registered/discipline:	
Louisiana P.E. License Passed October 2023 Georgia, Engineering Intern (No. EIT029180, 2022)	
Other experience and qualifications relevant to the proposed Project:	
<p>Bryson S. Beard, P.E., is an Associate Geotechnical Engineer/Field Engineer who serves as a Project Manager. He has performed geotechnical engineering analyses consisting of shallow and deep foundations, slope stability, TRS and sheetpile wall design, settlement, pavement design, etc., and has prepared engineering reports. Mr. Beard's experience in the field includes surface and subsurface soil sampling, water sampling, and soil classification. His work experience further includes core logging and oversight of groundwater monitoring well installations, piezometers, and inclinometers. He has been responsible for the preparation of reports and Facility Response Plans. He is experienced with laboratory sample preparation and testing as well as air sampling and soil gas sampling.</p> <p>Mr. Bryson recently passed his Louisiana Professional Engineering test and will be a noted P.E. for the State of Louisiana once he fulfills the apprenticeship requirements set forth by LAPELS.</p> <p>Woodlake Drainage Pump Station - Geotechnical Exploration Report, Kenner, Jefferson Parish, LA. Prepared a Geotechnical Exploration Report for the project which consisted of a new drainage pump station located in Kenner, LA. Access to the canal was via Lake Pontchartrain. During the Field investigation, Gulf South drilled multiple undisturbed soil borings with one performed in the canal and the remaining on land. Geotechnical laboratory testing (ASTM standards) was performed. Following the collection of the field and laboratory data, evaluations necessary to characterize the subsoil conditions of the site were performed; findings, conclusions, and recommendations were presented in the final report. (\$48,000 (fee); 2024)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Bryson S. Beard, P.E., ACI (continued)**

Midway at Soniat Canal Pump Station Elevator Generator Platform (Silver Oak Lane), Harahan, Jefferson Parish, LA. Geotechnical engineering services for the construction of a new elevated generator platform at the Midway Soniat Canal pump station off Silver Oak Lane in Harahan, LA. Gulf South's scope of services includes drilling a single undisturbed soil boring to a depth of 100 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$7,500 (fee); 2022)

Lee Street Drainage Pump Station Improvements, City of Slidell, LA. Prepared a Geotechnical Exploration Report for the project site located at the junction of Lee Street and Front Street in Slidell, LA. Gulf South's scope includes drilling soil borings to 50 ft. in depth, laboratory testing, engineering analyses (soil bearing values, bedding & backfill, pile capacities, and estimates of settlement) and general construction procedures and recommendations. (\$4,000 (fee); 2022)

Pump Station 45 Upgrades (Clark Street), East Baton Rouge Parish, LA. Geotechnical investigation regarding the construction of a new pump station and a new 5 MG tank (with the option to build a second tank) at the existing PS 45 site along Clark Street in Baton Rouge, LA. Scope of services included drilling 11 undisturbed soil borings to depths of 80 to 120 ft. below the ground surface. Geotechnical laboratory testing were performed to ASTM standards and include strength test (unconfined and/or triaxial), classification tests (Atterberg Limits and/or particle size), consolidation tests, and others as appropriate. Geotechnical engineering analyses included allowable soil bearing values, shaft/pile load capacities, estimates of settlements, sludge loading analyses, and general construction procedures and recommendations. (\$68,000 (fee); 2023)

Brewster Road/LA 1077 Drainage Improvements, Madisonville, St. Tammany Parish, LA. Geotechnical engineering services for drainage improvements at the existing parish canal off LA-1077 and Galatas Road in Madisonville, St. Tammany Parish, LA. Gulf South's scope includes drilling five undisturbed soil borings to depths of 20 feet (2 locations) and 30 feet (3 locations) below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$20,000 (fee); 2022)

Kinler & Paul Fredrick Street Drainage Improvements, Luling, St. Charles Parish, LA. Geotechnical investigation for paved and/or reconstruction of Kinler and Paul Frederick Streets in Luling. Scope included drilling a total of 10 undisturbed soil borings for the project (five borings within each roadway to a depth of 10 feet below the pavement surface). Geotechnical laboratory testing was performed on selected samples collected during the exploration in accordance with appropriate ASTM standards; this included strength tests (unconfined and/or triaxial) and classification tests (Atterberg Limits and/or particle size). Following the collection of the field and laboratory data, a geotechnical engineer performed the evaluations necessary to characterize the subsoil conditions of the site and develop the engineering recommendations and analyses. This included current pavement materials and thicknesses, flexible pavement design recommendations, and general construction procedures and recommendations. (\$7,500 (fee); 2022)

Chateau Transfer Station Upgrade, City of Kenner, LA. Geotechnical engineering services for the upgrades of an existing below grade sewer lift station (Chateau Transfer Station) in Kenner, LA. Gulf South's scope of services includes drilling two undisturbed soil borings to depths of 70 and 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$7,500 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Joseph H. “Trey” Binder, III, ACI Laboratory Manager	
Project Assignment:	
Laboratory Manager; Laboratory Technician	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years’ experience with this Firm:	
13 years (joined Gulf South in 2011); 13 years total (2011)	<i>Gulf South Engineering and Testing, Inc. 2011 to present</i> <i>Ardaman and Associates, Inc. 2007 to 2011</i> <i>Soil Testing Engineers, Inc. 2006 to 2007</i>
Education: Degree(s)/Year/Specialization:	
A.D., General Studies (2006; Nunez Community College)	
Active Registration: Year first registered/discipline:	
HAZMAT Awareness HAZMAT Operations Training ACI Aggregate Base Testing Technician ACI Concrete Strength Testing Technician	
Other experience and qualifications relevant to the proposed Project:	
<p>Trey Binder has direct experience with field and laboratory testing services. Mr. Binder’s field work includes soil inspection and testing consisting of nuclear density testing and soil boring logging, vibration monitoring, pile inspection, concrete testing and inspection, asphalt testing and inspection, and pavement coring. In the laboratory, Mr. Binder has performed soil laboratory testing consisting of unconfined compression strength tests, triaxial strength tests, Atterberg limits, organic content tests, moisture and density tests, Proctor compaction tests, sieve analyses, and sample extrusion.</p> <p>Mississippi River Discharge Pump Station, River Ridge, Jefferson Parish, LA. Gulf South provided geotechnical engineering services for the construction of a new pump station and force main discharge pipeline between Coventry Court and Lee Court. Scope includes drilling four undisturbed soil borings (one at 100 ft., one at 80 ft., and two at 30 ft.; all below ground surface), laboratory testing, engineering analyses (soil bearing values, pile load capacities, settlement estimates, retaining structure recommendations, slope stability analyses) and general construction procedures and recommendations. Pump station was located on flood side of the Mississippi River levee with discharge pipes crossing the levee to the protected side. (\$35,000 (fee); 2022)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Joseph H. "Trey" Binder, III, ACI (continued)**

Woodlake Drainage Pump Station - Geotechnical Exploration Report, Kenner, Jefferson Parish, LA. Prepared a Geotechnical Exploration Report for the project which consisted of a new drainage pump station located in Kenner, LA. Access to the canal was via Lake Pontchartrain. During the Field investigation, Gulf South drilled multiple undisturbed soil borings with one performed in the canal and the remaining on land. Geotechnical laboratory testing (ASTM standards) was performed. Following the collection of the field and laboratory data, evaluations necessary to characterize the subsoil conditions of the site were performed; findings, conclusions, and recommendations were presented in the final report. (\$48,000 (fee); 2024)

Taft Park Drainage Improvements, Jefferson Parish, LA. Perform inspection and testing during construction of various drainage improvements at Taft Park. Scope of services provided by Gulf South included asphalt and/or concrete testing and inspection, field density tests, on-site inspection and documentation, and laboratory testing. (\$25,000 (fee); 2015)

N. Sibley Pump Station Improvements, Metairie, Jefferson Parish, LA. Provided construction materials testing for the project, located at the corner of N. Sibley Street and West Napoleon Avenue. Scope of work includes soil density tests, concrete inspection and testing, pile driving, pile load tests monitoring, vibration monitoring, and earthwork testing. (\$20,000 (fee); 2021)

Citrus Road and Greg Court Subsurface Drainage Improvements, Jefferson Parish, LA. Gulf South provided the materials testing and inspection during construction. Gulf South's scope of services included vibration monitoring, bedding and backfill testing, compaction/density tests, and concrete testing and inspection. (\$20,000 (fee); 2019)


Lake Cataouatche Pump Station, Avondale, Jefferson Parish, LA. Geotechnical engineering services for the construction of a replacement Lake Cataouatche drainage pump station in Avondale, LA. Gulf South's scope includes drilling a single undisturbed soil boring (depth of 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. (\$12,500 (fee); 2019)

Trudeau Drive at Canal No. 5 Drainage Improvements, Metairie, Jefferson Parish, LA. Gulf South provided the materials testing and inspection during construction. Gulf South's scope of services included vibration monitoring, bedding and backfill testing, compaction/density tests, and concrete testing and inspection. (\$10,000 (fee); 2019)

Parish Line Drainage Pump Station Improvements – Phase I, City of Kenner, Jefferson Parish, LA. Gulf South performed field and laboratory testing during construction of a new pump station in Jefferson Parish, Louisiana. Scope of services consisted of vibration monitoring, timber pile inspection at the site and during installation, performance of a pile load test, earthwork, and concrete testing & inspection. (\$10,000 (fee); 2018)

Drainage Improvements, Citrus Road & Greg Court, Metairie, Jefferson Parish, LA. Geotechnical investigation for drainage improvements (2000 lf) along Citrus Road & Greg Court (to Jefferson Highway) in Metairie, LA. Gulf South's scope includes pavement coring and drilling five undisturbed soil borings each to 20 feet below ground surface, lab testing, and engineering analyses (including allowable soil bearing values, bedding and backfill recommendations), estimates of settlement, pavement design recommendations, and general construction recommendations. (\$8,500 (fee); 2017)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Eric A. Paille, C.E.T., ACI Construction Services Manager	
Project Assignment:	
Construction Services Manager	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
13 years (joined Gulf South in 2011); 35 years total (1989)	<i>Gulf South Engineering and Testing, Inc. 2011 to present</i> <i>Ardaman and Associates, Inc. 2007 to 2011</i> <i>Soil Testing Engineers, Inc. 1988 to 2007</i>
Education: Degree(s)/Year/Specialization:	
High School Diploma	
Active Registration: Year first registered/discipline:	
<i>ACI-I Field Technician (since 1991; No. 929012)</i> <i>Certified Engineering Technician (since 1992)</i> <i>Nuclear Gauge Safety Training (since 1994; No. 061321)</i> <i>Pile Driving Analyzer/CAPWAP, OSHA 40 HAZWOPER</i>	
Other experience and qualifications relevant to the proposed Project:	
<p>Eric A. Paille, C.E.T., ACI, serves as Gulf South's Construction Services Manager as well as the manager of our Gonzales office. He has experience as a technician, inspector, and testing manager, and is knowledgeable in all aspects of construction materials testing and construction inspection. Mr. Paille has performed all applicable field and soil tests over the past 30+ years. In addition, he is certified in the safe use and handling of the nuclear density gauge. He received PDA training in 2003 and has knowledge of PDA testing along with significant experience with pile driving analyzers. Mr. Paille is one of the most knowledgeable people in our industry.</p> <p>St. Peter's Ditch – Phase IV (Pump Station at Clearview), Metairie, Jefferson Parish, LA. Project consisted of the construction of a new pump station and below grade culverts and piping for the Jefferson Parish Department of Public Works. Gulf South provided materials testing and inspection during construction (CMT). Scope included performing pile plant inspection, pile monitoring during installation, vibration monitoring, concrete testing and inspection, earthwork testing and inspection including soil sampling and field density tests, and steel inspection. (\$110,000 (fee); 2016)</p> <p>N. Sibley Pump Station Improvements, Metairie, Jefferson Parish, LA. Gulf South provided construction materials testing for the project, located at the corner of N. Sibley Street and West</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Eric A. Paille, C.E.T., ACI (continued)**

Napoleon Avenue. Gulf South's scope of work includes soil density tests, concrete inspection and testing, pile driving, pile load tests monitoring, vibration monitoring, and earthwork testing. (\$20,000 (fee); 2021)

Clearview Parkway Drainage Project, Metairie, Jefferson Parish, LA. Project consisted of the construction of new drainage features for the Jefferson Parish Department of Public Works. Gulf South provided materials testing and inspection during construction (CMT). Gulf South's scope of services included performing pile plant inspection, pile monitoring during installation, vibration monitoring, concrete testing and inspection, earthwork testing and inspection including soil sampling and field density tests, and steel inspection. (\$30,000 (fee); 2016)

FEMA Submerged Roads Program (CMT): Phase 3, Metairie, Jefferson Parish, LA. Perform asphalt and roadway testing and inspection as requested. Scope of services provided by Gulf South included asphalt and/or concrete testing and inspection, field density tests, on-site inspection and documentation, and laboratory testing. Gulf South also provided asphalt batch plant inspection. (\$10,000 (fee); 2016)

Westwego Pump Station #1, Jefferson Parish, LA. Gulf South performed field and laboratory testing during pump station #1 installation. Scope of services included field density tests, concrete testing and inspection, laboratory testing, and vibration monitoring. (\$10,000 (fee); 2016)


Waggaman Subsurface Drainage Improvements, Waggaman, Jefferson Parish, LA. Project consisted of the construction of new below grade drainage features and piping for the Jefferson Parish Department of Public Works. Gulf South provided materials testing and inspection during construction (CMT). Our scope of services included performing pile plant inspection, pile monitoring during installation, vibration monitoring, concrete testing and inspection, earthwork testing and inspection including soil sampling and field density tests, and steel inspection. (\$7,000 (fee); 2016)

Airline Park Blvd. Rehabilitation and Drainage Upgrade (W. Napoleon to Camphor), Jefferson Parish, LA. Geotechnical investigation for pavement rehabilitation, new drain lines, and a new pump station from W. Napoleon to Camphor. Scope of work included drilling four soil borings (depths of 15 & 50 ft), laboratory testing (strength and classification), and geotechnical engineering analysis consisting of allowable soil bearing values, allowable pile load capacities, estimates of settlement, pavement recommendations, bedding and backfill recommendations, and general construction recommendations. (\$8,500 (fee); 2015)

New Pump/Lift Station, Airline Park Boulevard at West Metairie Avenue, Jefferson Parish, LA. Geotechnical investigation for a new pump/lift station for Jefferson Parish near the intersection of Airline Park Blvd. and W. Metairie Avenue. Scope of work consisted of performing one soil boring to 50 feet, laboratory testing, and geotechnical engineering analyses consisting of allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction recommendations. (\$5,000 (fee); 2013)

Drainage Improvement to North Sibley Drive at West Napoleon Avenue, Metairie, Jefferson Parish, LA. Gulf South executed a geotechnical investigation for new below grade wet well, approx. 15 - 20 feet deep. Drilled one boring to 80 feet at site and provide laboratory testing and geotechnical engineering analyses (soil bearing values, bedding, and backfill, pile capacities, settlement, construction recommendations, etc.). (\$4,500 (fee); 2012)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Ian Kerner Poché, ACI Assistant Laboratory Supervisor	
Project Assignment:	
Assistant Laboratory Supervisor	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
7 years (joined Gulf South in 2017); Gulf South Engineering and Testing, Inc. 2017 to present 7 years total (2017)	
Education: Degree(s)/Year/Specialization:	
High School Diploma	
Active Registration: Year first registered/discipline:	
ACI Concrete Field Testing Technician - Grade 1 (exp 2028 03) ACI Aggregate Testing Technician - Level 1 (exp 2029 02 27)	
Other experience and qualifications relevant to the proposed Project:	
<p>Ian Poché has worked in Gulf South's laboratory for several years and has experience with virtually every type of soil test. He has also helped when needed in the CMT department and has concrete testing experience, and is an ACI-certified Concrete Field Testing Technician.</p> <p>Lake Cataouatche Drainage Pump Station Replacement (Chighizola Lane), Grand Isle, Jefferson Parish, LA. Geotechnical engineering services for the construction of a replacement Lake Cataouatche drainage pump station at the end of Chighizola Lane in Grand Isle. Gulf South's scope includes drilling one undisturbed soil borings to a depth of 80 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Pump station is close to a USACE floodwall so coordination and geotechnical engineering analyses were required to show the new pump station would not adversely affect the integrity of the floodwall. (\$7,500 (fee); 2020)</p> <p>Woodlake Drainage Pump Station - Geotechnical Exploration Report, Kenner, Jefferson Parish, LA. Prepared a Geotechnical Exploration Report for the project which consisted of a new drainage pump station located in Kenner, LA. Access to the canal was via Lake Pontchartrain. During the Field investigation, Gulf South drilled multiple undisturbed soil borings with one performed in the canal and the remaining on land. Geotechnical laboratory testing (ASTM standards) was performed. Following the collection of the field and laboratory data, evaluations necessary to characterize the subsoil conditions of the site were performed; findings, conclusions, and recommendations were presented in the final report. (\$48,000 (fee); 2024)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Ian Kerner Poché, ACI (continued)**

Pump Station 45 Upgrades (Clark Street), East Baton Rouge Parish, LA. Geotechnical investigation regarding the construction of a new pump station and a new 5 MG tank (with the option to build a second tank) at the existing PS 45 site along Clark Street in Baton Rouge, LA. Scope of services included drilling 11 undisturbed soil borings to depths of 80 to 120 ft. below the ground surface. Geotechnical laboratory testing were performed to ASTM standards and include strength test (unconfined and/or triaxial), classification tests (Atterberg Limits and/or particle size), consolidation tests, and others as appropriate. Geotechnical engineering analyses included allowable soil bearing values, shaft/pile load capacities, estimates of settlements, sludge loading analyses, and general construction procedures and recommendations. (\$68,000 (fee); 2023)


Dellwood Drainage Pump Station Improvement (Sun Valley Drive & Front Street), City of Slidell, LA. Geotechnical engineering services for construction improvements to the existing drainage pump station at the end of Sun Valley Drive and Front Street in Slidell, LA. Gulf South's scope of services includes drilling a single boring to a depth of 50 feet below the ground surface, laboratory testing, engineering analyses (bearing values, settlement, pile and shaft capacities) and general construction procedures and recommendations. (\$4,000 (fee); 2022)

Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

Wastewater Treatment Plant Improvements, Eden Isle Subdivision, Slidell, St. Tammany Parish, LA. Geotechnical engineering services for the construction of a new elevated storage building housing six blower units and slab-on-grade supported water storage, concrete tank within the wastewater treatment plant off Lakeview Drive in Slidell, LA. Gulf South's scope includes drilling two undisturbed soil borings to depths of 40 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. (\$7,500 (fee); 2022)

Kinler & Paul Fredrick Street Drainage Improvements, Luling, St. Charles Parish, LA. Geotechnical investigation for paved and/or reconstruction of Kinler and Paul Frederick Streets in Luling in St. Charles Parish, LA. Scope included drilling a total of 10 undisturbed soil borings for the project (five borings within each roadway to a depth of 10 feet below the pavement surface). Geotechnical laboratory testing was performed on selected samples collected during the exploration in accordance with appropriate ASTM standards; this included strength tests (unconfined and/or triaxial) and classification tests (Atterberg Limits and/or particle size). Following the collection of the field and laboratory data, a geotechnical engineer performed the evaluations necessary to characterize the subsoil conditions of the site and develop the engineering recommendations and analyses. This included current pavement materials and thicknesses, flexible pavement design recommendations, and general construction procedures and recommendations. (\$7,500 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Brandon A. Paille, ACI Construction Materials Testing (CMT) Supervisor/Project Manager	
Project Assignment:	
Construction Materials Testing (CMT) Supervisor/Project Manager	
Name of Firm with which associated:	
<div style="display: flex; align-items: center;">  <div> ENGINEERING AND TESTING, INC. Geotechnical & Materials Consultants </div> </div>	
Years' experience with this Firm:	
5 years (2012-2016; 2023 to present); 14 years total (2010)	<i>Gulf South Engineering and Testing, Inc. 2023 to present</i> <i>Ascension Parish Sheriff's Office 2016 to 2023</i> <i>Gulf South Engineering and Testing, Inc. 2012 to 2016</i> <i>Ardaman and Associates, Inc. 2010 to 2012</i>
Education: Degree(s)/Year/Specialization:	
<i>High School Diploma</i>	
Active Registration: Year first registered/discipline:	
APNGA Nuclear Gauge Safety ACI Field Technician Level 1 OSHA Safety Training – 8 hr.	
Other experience and qualifications relevant to the proposed Project:	
<p>Brandon A. Paille, ACI has performed soil laboratory testing consisting of unconfined compression strength tests, triaxial strength tests, hydrometers, Atterberg limits, organic contents, moisture contents, proctor compaction tests, sieve analyses, as well as extrusion of samples. Mr. Paille's field experience includes soil inspection and testing consisting of nuclear density testing, soil boring logging, concrete testing and inspections, timber and precast pile logging and vibration monitoring. In Mr. Paille's years in the construction materials testing industry, he has obtained a vast amount of knowledge and experience which makes him an integral part of our Gulf South Team.</p> <p>Taft Park Drainage Improvements, Jefferson Parish, LA. Perform inspection and testing during construction of various drainage improvements at Taft Park. Scope of services provided by Gulf South included asphalt and/or concrete testing and inspection, field density tests, on-site inspection and documentation, and laboratory testing. (\$25,000 (fee); 2015)</p> <p>New Pump/Lift Station, Airline Park Boulevard at West Metairie Avenue, Jefferson Parish, LA. Geotechnical investigation for a new pump/lift station for Jefferson Parish near the intersection of Airline Park Blvd. and W. Metairie Avenue. Scope of work consisted of performing one soil boring to 50 feet, laboratory testing, and geotechnical engineering analyses consisting of allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction recommendations. (\$5,000 (fee); 2013)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Brandon A. Paille, ACI (continued)**

Submerged Roads Program: District 5, Project 1, Jefferson Parish, LA. Gulf South performed asphalt testing and inspection as instructed by the client. (\$12,000 (fee); 2013)

Bonanza Pump Station Flood Protection, Houma, Terrebonne Parish, LA. Geotechnical investigation for replacement of an existing bulkhead at Terrebonne Parish's Bonanza Pump Station in Houma, LA. Gulf South's scope of work included performing a soil boring to a depth of 80 feet, laboratory testing, and geotechnical engineering analyses consisting of bulkhead design parameters (tip depth, bending moment, anchor force, etc.), and general construction recommendations. (\$4,500 (fee); 2013)

New North Terminal – New Pump Station, Louis Armstrong New Orleans International Airport, LA. Gulf South performed field and laboratory testing during construction of a new Pump Station at the New North Terminal at the Louis Armstrong New Orleans International Airport in Kenner, Louisiana. Gulf South provided QA oversight of the contractor for the owner for this \$1.2 billion project which consists of the construction of a new terminal facility including a new 800,000 sf building, vehicle ramps, parking, etc. QA inspection consists of pile monitoring, concrete inspection and testing, earthwork testing and inspection, and steel inspection. (\$100,000 (fee); 2019)

Drainage System Engineering Analysis – CCTV Drain Line Inspections, City of New Orleans, LA. Project management and oversight of cleaning/flushing and inspection of sewer drainage pipelines in New Orleans, LA. Gulf South oversaw field operations and coordinated project phases with subcontractors. Subcontractor's inspection methods will utilize CCTV camera equipment to record drain line data. During post processing phase, all data was compiled and consolidated to create a digital database of the drain line information. (\$20,000 (fee); 2014)

Bucktown Paddlers Launch, Metairie, Jefferson Parish, LA. Gulf South provided construction materials testing and inspection during construction of the project. Gulf South's scope of work includes building earthwork, paving & concrete, concrete testing, soil density tests, pile inspection and modeling, and vibration monitoring. (\$15,000; 2023)

St. James Road Program 2023 (Nicole Street), Paulina, St. James Parish, LA. Gulf South provided construction materials testing and inspection during construction of the project. Gulf South's scope of work includes soil density tests and asphalt inspection. (\$7,220 (fee); 2023)

Kenner Discovery School, Kenner, LA. Gulf South provided construction materials testing and inspection during construction of the project located at 201 Vintage Drive in Kenner. Gulf South's scope of work includes concrete testing and steel inspection. (\$1,028 (fee); 2022)

New North Terminal – Roads, Louis Armstrong New Orleans International Airport, LA. Gulf South performed field and laboratory testing during construction of various roads at the New North Terminal at the Louis Armstrong New Orleans International Airport in Kenner, Louisiana. Gulf South provided QA oversight of the contractor for the owner for this \$1.2 billion project which consists of the construction of a new terminal facility including a new 800,000 sf building, vehicle ramps, parking, etc. QA inspection consists of pile monitoring, concrete inspection and testing, earthwork testing and inspection, and steel inspection. (\$250,000 (fee); 2019)

TEC Professional Services Questionnaire

- L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this project. Please include and all work performed for Jefferson Parish. Please attach additional pages if necessary.**

PROJECT NO. 1

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Woodlake Drainage Pump Station - Geotechnical Exploration Report, Kenner, Jefferson Parish, Louisiana MSMM Engineering, LLC 7640 S. Carrollton Ave Ste 220 New Orleans LA 70119 Scott G. Chehardy, P.E., 985-233-9763 schehardy@msmmeng.com	Prepared a Geotechnical Exploration Report for the project which consisted of a new drainage pump station located in Kenner, LA. Access to the canal was via Lake Pontchartrain. During the Field investigation, Gulf South drilled multiple undisturbed soil borings with one performed in the canal and the remaining on land. Geotechnical laboratory testing (ASTM standards) was performed. Following the collection of the field and laboratory data, evaluations necessary to characterize the subsoil conditions of the site were performed; findings, conclusions, and recommendations were presented in the final report.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2024	N/A	\$48,000 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Midway at Soniat Canal Pump Station Elevator Generator Platform (Silver Oak Lane), Harahan, Jefferson Parish, Louisiana Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119 Henry M. Picard, III, P.E., 504-486-5901 hpicard@bkusa.com	Geotechnical engineering services for the construction of a new elevated generator platform at the Midway Soniat Canal pump station off Silver Oak Lane in Harahan, LA. Gulf South's scope of services includes drilling a single undisturbed soil boring to a depth of 100 feet below the ground surface, laboratory testing, engineering analyses (pile capacities & settlement) and general construction procedures and recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2022	N/A	\$7,500 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Mississippi River Discharge Pump Station , River Ridge, Jefferson Parish, Louisiana ECM Consultants, Inc. 1301 Clearview Parkway Suite 200 Metairie LA 70001 Susina Shrestha, P.E. , 504-885-4080 sshrestha@ecmconsultants.com	Gulf South provided geotechnical engineering services for the construction of a new pump station and force main discharge pipeline between Coventry Court and Lee Court in River Ridge. Scope includes drilling four undisturbed soil borings (one at 100 ft., one at 80 ft., and two at 30 ft.; all below ground surface), laboratory testing, engineering analyses (soil bearing values, pile load capacities, settlement estimates, retaining structure recommendations, slope stability analyses) and general construction procedures and recommendations. Pump station was located on flood side of the Mississippi River levee with discharge pipes crossing the levee to the protected side.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2022	N/A	\$35,000 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
N. Sibley Pump Station Improvements , Metairie, Jefferson Parish, Louisiana Digital Engineering 527 W Esplanade Ave Ste 200 Kenner LA 70065 Frank T. Liang, P.E. , 504-468-6129 fliang@deii.net	Gulf South provided construction materials testing for the project, located at the corner of N. Sibley Street and West Napoleon Avenue. Gulf South's scope of work includes soil density tests, concrete inspection and testing, pile driving, pile load tests monitoring, vibration monitoring, and earthwork testing.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2021	N/A	\$20,000 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Metairie Lawn and Ridgelake Drive Roadway & Utility Project , Metairie, Jefferson Parish, Louisiana Ardurra Group, Inc. 3012 26th Street Metairie LA 70002 Joe Becker, P.E. , 504-454-3866 jbecker@ardurra.com	Geotechnical engineering services for construction of a new roadway paving and below grade drainage pipeline in Metairie, LA. Gulf South's scope includes drilling five (5) auger borings to a depth of 20 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2021	N/A	\$8,500 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Lake Cataouatche Drainage Pump Station , Avondale, Jefferson Parish, Louisiana Jefferson Parish 1221 Elmwood Park Blvd Ste 907 Jefferson LA 70123 Mitch Theriot, P.E. , 504-736-6742 mtheriot@jeffparish.net	Geotechnical engineering services for the construction of a replacement for the Lake Cataouatche drainage pump station in Avondale, LA. Gulf South's scope includes drilling a single undisturbed soil boring (depth of 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. Pump station is close to a USACE floodwall so coordination and geotechnical engineering analyses were required to show the new pump station would not adversely affect the integrity of the floodwall.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
October 2019	N/A	\$12,500 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lake Cataouatche Drainage Pump Station Replacement (Chighizola Lane), Grand Isle, Jefferson Parish, Louisiana</p> <p>Principal Engineering, Inc. 1011 N Causeway Blvd Ste 19 Mandeville LA 70471</p> <p>André C. Monnot, P.E., 985-624-5001 andre@pi.aec.com</p>	<p>Geotechnical engineering services for the construction of a replacement Lake Cataouatche drainage pump station at the end of Chighizola Lane in Grand Isle. Gulf South's scope includes drilling one undisturbed soil borings to a depth of 80 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Pump station is close to a USACE floodwall so coordination and geotechnical engineering analyses were required to show the new pump station would not adversely affect the integrity of the floodwall.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2020	N/A	\$7,500 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Verrett Canal Slope Instability Project, West Bank Drainage Department, Harvey, Jefferson Parish, Louisiana</p> <p>Jefferson Parish Engineering Department 1221 Elmwood Park Blvd Ste 802 Jefferson LA 70123</p> <p>Clinton Hotard, 504-736-6500 chotard@jeffparish.net</p>	<p>Geotechnical engineering services for the potential solution (i.e. retaining wall, etc.) for the surface movement at the top slope of Verrett Canal located at 89 Natchez Trace in Harvey, LA. Gulf South's scope includes drilling a single undisturbed soil boring (depth of 60 ft. bgs), laboratory testing, engineering analyses and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2020	N/A	\$5,000 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Drainage Infrastructure Improvements, South Avondale Subdivision, Avondale, Jefferson Parish, Louisiana</p> <p>Phoenix Global Construction 2901 Independence St Ste 103 Metairie LA 70006</p> <p>Jack Lo, 504-883-9021 phoenixglobal@bellsouth.net</p>	<p>Geotechnical investigation for drainage improvements on S. Jamie Boulevard in Avondale, LA. Gulf South's scope includes drilling five undisturbed soil borings to depths of 20 feet, lab testing, and engineering analyses including allowable soil bearing values, bedding and backfill recommendations, estimates of settlement, and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2018	N/A	\$7,000 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Drainage Improvements, Citrus Road & Greg Court, Metairie, Jefferson Parish, Louisiana</p> <p>Buchart Horn 18163 E Petroleum Drive, Suite A Baton Rouge LA 70809</p> <p>Alan Krouse, P.E., 225-308-2009 akrouse@bucharthorn.com</p>	<p>Geotechnical investigation for drainage improvements (2000 lf) along Citrus Road & Greg Court (to Jefferson Highway) in Metairie, LA. Gulf South's scope includes pavement coring and drilling five undisturbed soil borings each to 20 feet below ground surface, lab testing, and engineering analyses (including allowable soil bearing values, bedding and backfill recommendations), estimates of settlement, pavement design recommendations, and general construction recommendations.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2017	N/A	\$8,500 (fee)

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.		
Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1.	<div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><i>Gulf South Engineering and Testing, Inc. is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</i></p> </div>	
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.



ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

CRITERIA 1 | PROFESSIONAL TRAINING AND EXPERIENCE

Gulf South Engineering and Testing, Inc. (Gulf South) is a geotechnical engineering and construction materials testing and inspection company which began operations in 2011. Since that time, we have grown to two offices and nearly three dozen employees.

Gulf South provides a broad range of geotechnical related services, completing more than 100 geotechnical engineering projects and 300 construction materials testing and inspection projects each year. These projects typically include soil borings (shallow and deep borings), laboratory testing (AASHTO, ASTM methods, etc.), soil classification (USCS), geotechnical engineering, and construction material testing and field inspection.

Gulf South is a woman-owned, Hudson Initiative-certified small entrepreneurship in Louisiana. Our laboratory is AASHTO and CCRL certified and USACE validated.

Geotechnical Engineering Services

Gulf South's ownership and senior management have decades of combined experience in the profession and have completed thousands of projects. One of Gulf South's Principals, Chad M. Poché, P.E., a founding principal and Professional Engineer registered in Civil Engineering in Louisiana and Mississippi, has specific and extensive training & experience in geotechnical engineering. He has three decades of experience in planning, administering, and conducting geotechnical investigations.

TEC Professional Services Questionnaire

N. continued.

The firm has specific engineering experience and training in **Geotechnical Engineering, Foundation Design, and Geology & Geohydrology**; our staff has extensive experience in all aspects of soil mechanics and geotechnical engineering with specific knowledge in the following areas:

- Shallow and deep foundations (piles, shafts, augercast, screw/anchor piles)
- Deep excavations, cofferdams, retaining walls
- Levees and soft ground construction; slope stability & seepage
- Earthwork; settlement analyses
- Shoreline protection
- Scour analyses
- LRFD Design
- Mechanically Stabilized Earth (MSE) Walls
- Development of load test programs
- Geotechnical instrumentation and construction monitoring
- Canals and pump station foundations
- Pipe bedding and backfill
- Roadways, bridges, pavements

Field Investigation Services

Gulf South owns truck mounted (ARDCO C-1000) and track mounted (ARDCO SD 350) drilling rigs with associated and appurtenant support equipment (water trucks and buggy). Our equipment and crews are capable of drilling soil borings to depths of up to 300 feet and installing monitor wells, piezometers, and inclinometers. We can also perform CPT soundings, geoprobe borings, and field testing at any site. Our staff has extensive experience in planning, oversight, and direction of field investigations.

Laboratory Testing Services

Gulf South's laboratory is equipped to serve the specific needs of our clients and managed by trained and experienced personnel. All testing is performed in accordance with ASTM, AASHTO, and/or other approved procedures. Gulf South routinely performs soil and concrete strength testing (unconfined and triaxial), soil classification tests (Atterberg limits, moisture content, density, particle size), soil and aggregate sieves, organic content, pH, soil resistivity, and moisture/density relationships (Proctor tests). Gulf South's laboratories are managed by full time, experienced, managers and staff. Further, Gulf South's Kenner laboratory is AASHTO and CCRL certified and USACE validated.

Construction Materials Testing & Inspection

Gulf South provides a full range of construction materials testing & inspection services for structures, earthwork, foundations, pipelines, and pavements. The range of services provided includes:

- Fill and base compaction and density testing
- Vibration monitoring

TEC Professional Services Questionnaire

N. continued.

- Pre- and post-construction inspection
- Concrete testing and inspection
- Soil testing (field and laboratory)
- Asphalt testing
- Pile (driven & augercast) and shaft installation monitoring
- Load tests
- Earthwork/proof roll inspection
- Welding inspection
- Steel inspection
- Noise monitoring
- Prepare daily field reports and/or field books
- Maintain records per the client's directive

We have provided construction testing and oversight for projects as small as fill for a house pad to as large as the **\$1.2 billion Louis Armstrong New Orleans International Airport North Terminal** project.

CRITERIA 2 | SIZE OF FIRM

At over 30 employees, Gulf South has the appropriate number of employees and personnel for this project. We will complete our scope of services on time and within budget. Further said, Gulf South can readily meet the time and budget constraints for projects assigned to this contract. Our current workload is such that we can expeditiously complete projects for this contract.

CRITERIA 3 | CAPACITY FOR TIMELY COMPLETION

Activity is dependent on the scope of work as well as site access and conditions, however; typically soil borings can be started within one week of receiving notice to proceed with a final product delivered within 3 to 4 weeks of completing the borings. Gulf South's workload & scheduling, coupled with our headquarters being nearby, will allow for assignment of key personnel shortly after any project is assigned.

CRITERIA 4 | PAST PERFORMANCE ON PARISH CONTRACTS

Gulf South has worked both directly and indirectly for various Jefferson Parish Departments (Public Works, Engineering Department, Drainage Department, Jefferson Parish School Board, etc.) throughout our history. Beyond the projects included within this form, additional project information (including listings, background, & client contacts) are available upon request. We have also completed similar services for Public and Private concerns throughout the region.

CRITERIA 5 | LOCATION OF THE PRINCIPAL OFFICE

Gulf South Engineering and Testing has been headquartered in Jefferson Parish since beginning operations in 2011; our principal office is located in Jefferson Parish at 15 Veterans Memorial Boulevard in Kenner. We also maintain an office in Gonzales, LA.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 6 | LEGAL STATEMENT

As stated in Item M, Gulf South has had no litigation, past or present, with Jefferson Parish, nor any of our clients.

CRITERIA 7 | PRIOR SUCCESSFUL COMPLETION OF PROJECTS

The Principals and key employees of Gulf South have many years of applicable experience in working for and with Government Agencies and private industry. Founding principal and Executive Vice President of Gulf South, Chad M. Poché, P.E., has been a practicing registered geotechnical engineer in South Louisiana since 1998. He has specialized training and experience in geotechnical engineering throughout Louisiana.

As evidenced in the provided projects and personnel résumés, key personnel experience includes the completion of thousands of projects in the region throughout their careers for a broad range of clients, including both the government and private sectors. We can submit data in formats acceptable and customized to our clients' needs.

Gulf South invites you to contact any of our clients for a candid discussion of our service and professionalism, and offer these direct references:

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish
(504-736-6783 | JPPW@jeffparish.net)

Ben Lepine, Acting Director, Drainage Department, Jefferson Parish
(504-736-6751 | JPDrainage@jeffparish.net)

Angela DeSoto, P.E., Director, Engineering Department, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

Mark R. Drewes, P.E., Director, Public Works Department, Jefferson Parish
(504-736-6783 | JPPW@jeffparish.net)

Michael B. Cooper, Parish President, St. Tammany Parish
(985-898-2362 | president@stpgov.org)

Joey Tureau, Director of Transportation, Ascension Parish
(225-450-1013 | jtureau@apgov.us)

José A. Gonzales, CAO, City of Kenner
(504-468-4090 | jgonzalez@kenner.la.us)

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: _____

Print Name: Chad M. Poché, P.E.

Title: Executive Vice President

Date: June 6, 2024

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:

Gulf South Engineering and Testing,
Inc.

Public Address:

Mr. Chad Poche, PE15 Veterans Memorial Boulevard
Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004626	Active	07/27/2010	03/31/2025	Mr. Chad Mitchell Poche# PE.0027667



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Chad Mitchell Poche

License/Certificate Type - Number

PE.0027667

Expiration Date

09/30/2024

Status: **Active**



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number

PLS.0004329

Expiration Date

09/30/2024

Status: **Active**



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

Gulf South Engineering and Testing, Inc.

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 12/27/2023 to 12/27/2024 .

Certification No. 11011

Stephanie Hartman,
Director, Entrepreneurial Services



**USACE CERTIFICATE
OF
LABORATORY VALIDATION**



Gulf South Engineering and Testing

15 Veterans Memorial Blvd
Kenner, LA, United States
Trey Binder
(504) 305-4401

has demonstrated, by abbreviated audit of its AASHTO accreditation, or by inspection of required records, equipment, procedures, facilities, and/or final reports, its proficiency to perform testing of construction materials, as established by the quality standards of AASHTO R 18 guidance and the requirements of the applicable ASTM standards.

THIS USACE CERTIFICATE OF LABORATORY VALIDATION IS ACCURATE AS OF ITS DATE AND TIME OF GENERATION:

06 MAY 2024 AT 14:40 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 05/03/2026

PLEASE CONFIRM THE CURRENT VALIDATION STATUS OF THIS LABORATORY USING THE SEARCH FEATURE ON OUR PUBLIC WEBSITE: <https://mtc.erdcdren.mil>

Chad A. Gartrell, PE, Director
USACE Materials Testing Center
Vicksburg, Mississippi, USA

AGGREGATE

Aggregate - C 128 - Specific Gravity & Absorption in Fine Aggregate
Aggregate - C 566 - Total Moisture Content
Aggregate - C 702 - Reducing Samples to Testing Size

CONCRETE

Concrete - C 31 - Making and Curing Test Specimens in the Field
Concrete - C 39 - Compressive Strength of Cylindrical Specimens
Concrete - C 138 - Unit Weight and Air Content by Gravimetric
Concrete - C 143 - Slump
Concrete - C 172 - Sampling
Concrete - C 231 - Air Content by Pressure ***required if C173 not performed***
Concrete - C 511 - Moist Cabinets, Moist Rooms, Water Storage Tanks
Concrete - C 1064 - Temperature of Concrete
Concrete - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)
Concrete - C 1231 - Unbonded Caps

SOILS

Soils - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Soils - D 421 - Dry Preparation for Particle Size Distribution & Soil Constants
Soils - D 422 - Particle Size Analysis (Sieve and Hydrometer)
Soils - D 698 - Compaction Characteristics by Standard Effort
Soils - D 1140 - Material Finer than 75 μ m (No. 200) Sieve
Soils - D 1556 - Density & Unit Weight by Sand Cone
Soils - D 1557 - Compaction Characteristics by Modified Effort
Soils - D 2166 - Unconfined Compressive Strength
Soils - D 2216 - Water Content
Soils - D 2487 - Classification of Soils
Soils - D 2488 - Description & Identification of Soils (Visual-Manual Procedure)
Soils - D 2974 - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
Soils - D 4318 - Liquid & Plastic Limits & Plasticity Index
Soils - D 4643 - Determination of Water Content of Soil by Microwave Oven
Soils - D 6938 - Density and Water Content by Shallow Depth Nuclear Method



CERTIFICATE OF ACCREDITATION



Gulf South Engineering and Testing, Inc.

in

Kenner, Louisiana, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).


Jim Tymon,
AASHTO Executive Director


Moe Jamshidi,
AASHTO COMP Chair

This certificate was generated on 04/11/2024 at 12:54 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory



Diversity Champion
Award 2023

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Gulf South Engineering and Testing, Inc.

8/15/2023

DATE



SIGNATURE

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Provision of Routine Engineering Services for

Drainage Projects in Jefferson Parish

SOQ **24-015** | Resolution No. **144202**

B. Firm Name & Address:



BFM Corporation, LLC

15 Veterans Memorial Boulevard | Kenner LA 70062

C. Name, title, and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Ralph P. Fontcuberta, Jr., PLS, Executive Vice President

504-468-8800 | 504-468-8800 cell | ralph@bfmcorporation.com

Registered Professional Land Surveyor (**Louisiana No. 4329; since 1974**)

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline:

Ralph P. Fontcuberta, Jr., PLS, Executive Vice President

504-468-8800 | 504-468-8800 cell | ralph@bfmcorporation.com

Registered Professional Land Surveyor (**Louisiana No. 4329; since 1974**)

E. Please provide the number of employees whose primary function corresponds with each category:

<u>4</u>	Administrative		Estimators		Specification Writers
	Architects (Licensed)		Geologists		Structural Engineers
	Chemical Engineers	<u>1</u>	Geotechnical Engineers		Graduate Engineers
	Civil Engineers		Interior Designers	<u>2</u>	Project Managers
	Construction Inspectors		Landscape Architects		Clerical (<i>see Administrative</i>)
	Ecologists	<u>1</u>	Land Surveyor (<i>Apprentice</i>)		Grant/Funding Specialist
	Electrical Engineers		Mechanical Engineers		Sanitary Engineers
	Engineer Intern		Environmental Engineers	<u>1</u>	<i>Researcher/Archivist</i>
<u>2</u>	Professional Land Surveyors			<u>3</u>	<i>CADD Technicians</i>
				<u>6</u>	<i>Survey Crew Chief</i>
				<u>6</u>	<i>Survey Crew Instrumentman</i>
				<u>26</u>	TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES _____ NO X

If marked "no", skip to Section I. If marked "yes", complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.		
1. N/A		
2.		
H. Has this JOINT-VENTURE previously worked together? Please check: YES _____ NO _____ N/A		
I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.		
Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2.		
3.		
J. Please specify the total number of support personnel that may assist in the completion of the Project: <div style="text-align: center; margin-top: 10px;"> <u>26</u> (all personnel will be available for assignment to the project) </div>		

TEC Professional Services Questionnaire

- K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e., résumé) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.**

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Ralph P. Fontcuberta, Jr., PLS

Executive Vice President / Registered Professional Land Surveyor

Project Assignment:

Registered Professional Land Surveyor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

42 years (Founding Principal of BFM in 1982); Gulf South Engineering and Testing, Inc. | 2017 to present
57 years total (1967) BFM Corporation, LLC | 1982 to present
Surveys, Inc. | 1967 to 1982
The Boeing Company | 1964 to 1967

Education: Degree(s)/Year/Specialization:

2 yr, Building Trade Curriculum, Delgado, New Orleans
2 yr, Mathematics Curriculum, University of New Orleans

Active Registration: Year first registered/discipline:

1974 / Professional Land Surveyor (Louisiana No. 4329)
1974 / Professional Land Surveyor (Mississippi No. 1633)

Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS has provided services on an almost incalculable number of surveying projects throughout southeastern Louisiana in the past half century and has been a registered Professional Land Surveyor (PLS) since 1974. He is thoroughly knowledgeable in all aspects of surveying: topographic, hydrographic, boundary, right-of-way surveying, and all facets thereof. He has provided surveying services for residential, plant, and industrial layout projects, ranging from small private lots & buildings to multi-million-dollar programs, including the New Orleans FEMA Streets/Recovery Roads Program. Since the beginning of his career, his work has entailed computations, drafting, and field work for various industrial, commercial, municipal, and private clients.

Project work has included topographic surveying needed for a wide variety of engineering, architectural, construction, and other related endeavors. This has included projects for numerous branches of virtually every regional city/parish/town government, multiple State agencies (LA Dept. of Natural Resources (LADNR), Coastal Protection & Restoration Administration (CPRA), LA

TEC Professional Services Questionnaire

Other experience and qualifications: **Ralph P. Fontcuberta, Jr., PLS (continued)**

Dept. of Transportation & Development (LADOTD), MS Dept. of Transportation (MDOT), and others), Federal agencies (U.S. Army Corps of Engineers (USACE), Dept. of the Navy, etc.), private/public companies (Entergy, BellSouth, Cox Cable, etc.), and numerous other public/private entities.

Mr. Fontcuberta's surveying experience with Jefferson Parish can be traced back to BFM's inception in 1982, and to 1967 then while working as a surveyor with another firm. He has over half a century of experience with surveying throughout the region and specifically with Jefferson Parish. He has served as the PLS for projects throughout every corner of Jefferson Parish. Relevant project history includes, but is certainly not limited to, the following:

- Lafitte Drainage Project, Town of Jean Lafitte, Jefferson Parish, LA
- Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, LA
- Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, LA
- Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA
- Coventry Drainage Pump Stations, River Ridge, Jefferson Parish, LA
- Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA
- Bissonet Plaza Drainage Improvements (Phase 1, Elmwood Parkway and Craig Avenue), Metairie, Jefferson Parish, LA
- North Arnoult Drainage Pump Station Improvements, Jefferson Parish, LA
- Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA
- Westwego Drainage Pump Station No. 1, Jefferson Parish, LA
- Bayou Segnette Drainage Pump Station No. 1 Survey Verification, Jefferson Parish, LA
- West Bank Expressway, Phase I Drainage Map, from Peters Road to Manhattan Boulevard, Jefferson Parish, LA
- Paillet - Maplewood Drainage Improvements, Jefferson Parish, LA
- Jack & Bores Survey (Drainage Project), Waggaman, Jefferson Parish, LA
- Taft Park Pump Station and Drain Line Path, Jefferson Parish, LA
- Mazoue Ditch Improvements, Phase I, Jefferson Parish, LA
- Emergency Generators at 13 Pump Station Sites, Jefferson Parish, LA
- Oakwood/Terrytown Drainage Improvements, Jefferson Parish, LA
- Massachusetts Avenue Drainage Improvements, Jefferson Parish, LA
- Orleans Village Subdivision Drainage Improvements, Jefferson Parish, LA
- Morton & Ingrid Pump Station, Jefferson Parish, LA
- Hoey's Canal Drainage Improvements (Deckbar Ave to Labarre Rd), Jefferson Parish, LA
- Drainage Pump Station, Veterans North & South, Right-of-Way, 17th Street Canal, Jefferson Parish, LA
- Mounes Subsurface Drainage - Phase I, Jefferson Parish, LA
- Marlin Court Drainage Project, Jefferson Parish, LA

TEC Professional Services Questionnaire

Other experience and qualifications: **Ralph P. Fontcuberta, Jr., PLS (continued)**

- Woodland West Drainage Improvements - Phase 2A, Vulcan Dr & Telestar St, Jefferson Parish, LA
- Sub-Basin 3 Proposed Improvements (Meadow St & Myrtle St), Bunche Village, Jefferson Parish, LA
- Avenue D Drainage Improvements, Jefferson Parish, LA
- Oakwood Terrytown Drainage Improvements (HMGP) (Carol Sue Drainage Improvements), Jefferson Parish, LA
- Taft Park Pump Station and Drain Line Path, Jefferson Parish, LA
- Maplewood & Paillet HMGP Project, West Bank Subsurface Drainage Improvement Program Phase II, Jefferson Parish, LA
- Hillings Ditch/Drolla/Suave Road Drainage Improvements, Jefferson Parish, LA
- Route Topographic (including Lift Station/Force Main) Surveying Services, Jefferson Parish, LA
- Paillet Pump Station Access Road and Drainage Improvements, Jefferson Parish, LA
- Westgate Subdivision Subsurface Drainage Improvements, Jefferson Parish, LA
- Canal No. 17 Bank Stabilization Phase II, Jefferson Parish, LA
- Clearview Drainage Pump Station and St. Peter's Ditch, Jefferson Parish, LA
- Johnson Street Drainage Improvements (Phases I & II), Jefferson Parish, LA
- Hero Pump Station, Harvey, Jefferson Parish, LA
- West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA
- Hilling Ditch Drainage Improvements, Jefferson Parish, LA
- Upper Kraak Pump Station, Jefferson Parish, LA
- Mason Ditch Drainage Improvements, Jefferson Parish, LA
- Hurricane Gustav Drainage Canal Repairs, East Bank, Jefferson Parish, LA
- Bannerwood Drainage Improvements, Jefferson Parish, LA
- Improvements to Bayou Segnette Drainage Pump Station No. 1, Jefferson Parish, LA
- Sena Drive Subsurface Drainage Improvements, Jefferson Parish, LA
- Drainage Improvements to the Canal No. 2 Culvert Crossing at California Avenue, Jefferson Parish, LA
- Kawanee Drive Drainage Improvements, Jefferson Parish, LA
- Mazoue Ditch Drainage Improvements Phase IV, Jefferson Parish, LA
- Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA
- Fulton Street Pump Station, Jefferson Parish, LA
- Parish Line Pump Station (Pump Station No. 5), Jefferson Parish, LA
- Mazoue Ditch Drainage Improvements (Rose Crest Lane to Darby Lane), Jefferson Parish, LA
- Breaux Ditch Improvements, East Ames Boulevard - Leo Kenner Parkway, Jefferson Parish, LA
- Manson Ditch (ICRR Ditch) Survey, Jefferson Parish, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Chad M. Poché, P.E.

Executive Vice President / Registered Professional Geotechnical Engineer

Project Assignment:

Engineering Liaison

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

7 years (became partial owner of BFM in 2017);
31 years total (1993)

BFM Corporation, LLC | 2017 to present
Gulf South Engineering and Testing, Inc. | 2011 to present
Ardaman and Associates, Inc. | 2007 to 2011
Eustis Engineering | 1996 to 2001
Soil Testing Engineers, Inc. | 1993 to 1996

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active Registration: Year first registered/discipline:

1998, Civil Engineer (Louisiana No. 27667)
2002, Civil Engineer (Mississippi No. 15405)

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. is an Executive Vice President with (and partial owner of) BFM Corporation, LLC, and a co-founder of BFM's sister company, Gulf South Engineering and Testing, Inc. He has been a consulting geotechnical engineer for nearly 30 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for waste facilities and virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations, and; serving as an Expert Witness. Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

TEC Professional Services Questionnaire

Other experience and qualifications: **Chad M. Poché, P.E. (continued)**

Coventry Drainage Pump Stations, River Ridge, Jefferson Parish, LA. BFM Corporation provided a Route Topographic Survey with Hydrographic Survey for the project, located in River Ridge, Louisiana. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Road). The hydrographic survey extended 500 feet into the river from the water's edge. The full scope of the project also included research of public land records; location of property corners; establishing a baseline along the rear property line and; establishing Temporary Benchmarks. Existing improvements were located, as well as visible above ground utilities and those underground utilities with visible surface evidence. The survey further determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established above. Trees were also located. Spot elevations were taken at 50-foot intervals within the Limits of Survey. (\$89,780 (fee); 2020)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying for this Drainage Evaluation Project (PW 2018-024-DR) in Jefferson Parish. The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (ROW) of Causeway Boulevard to easterly apparent R/W of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM Corporation executed a Route Topographic Survey for the Allo Street project area, which extended from 4th Street to 6th Street. A baseline was established along the centerline of Allo Street, with Temporary Benchmarks at each intersection along the route. Cross sections taken on a 25 ft. grid. Existing improvements were located within the designated Limits of Survey, as were visible above-ground and underground utilities, piping, and natural features including trees and shrubbery. (\$12,855 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary J. Lambert, Jr., PLS

Vice President / Registered Professional Land Surveyor

Project Assignment:

Project Manager/Drafting Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

6 years (joined BFM in 2018);
13 years total (2011)

BFM Corporation, LLC | 2018 to present
Riverlands Surveying | 2016 to 2018
Bertucci Contracting | 2011 to 2016

Education: Degree(s)/Year/Specialization:

B.S., 2018, Geomatics, Nicholls State University

B.S., 2014, Construction Management, Louisiana State University

Active Registration: Year first registered/discipline:

2021, Professional Land Surveyor (Louisiana No. 5929)

Other experience and qualifications relevant to the proposed Project:

Gary J. Lambert, Jr., is a registered Professional Land Surveyor in Louisiana and provides Project Management and Drafting Oversight for BFM Corporation. He is the first point of contact for clients on technical matters, scheduling, and deliverables for project work, and conducts meetings with engineering, architectural, and government officials to discuss various project needs. His project work has encompassed all manner of surveying services, from basic home lots to 100+ acre tract boundary surveys.

In the field, Mr. Lambert has provided services as a Survey Crew Chief, using both traditional and robotic surveying methods, since the start of his professional career, and has experience with Leica, Hypack, AutoCAD, AutoCAD 3D, Trimble, and RTK surveying technologies. He further trains employees in the use of an aerial drone, laser scanner, and remote-controlled hydrographic survey boat. This survey experience includes topographic, boundary, ALTA/NSPS, FEMA, and various construction surveying. Mr. Lambert has also conducted hydrographic surveys in the Mississippi River and various other bodies of water throughout the Gulf Coast area.

Mr. Lambert has completed Basic OSHA Training and holds license with the Gulf Coast Safety Council (08SSV, ID429523).

TEC Professional Services Questionnaire

Other experience and qualifications: **Gary J. Lambert, Jr., PLS (continued)**

Westwego Drainage Pump Station No. 1, Jefferson Parish, LA. BFM Corporation provided services for a Limited Topographic Survey at the project site, Westwego Drainage Pump No. 1. The scope of services first re-established Site Horizontal and Vertical control, as these were established as part of a previous BFM project (BFM No. 9730). Services next included locating existing improvements within the designated Limits of Survey, taking elevations and cross sections, and verification of piping and utilities. (\$4,725 (fee); 2018)

Lafitte Drainage Project, Town of Jean Lafitte, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying services for a proposed drainage servitude project in the Town of Jean Lafitte in Jefferson Parish, LA. The project built on a previous BFM project (No. 10309). The project also included provision of boundary surveying in order to provide a servitude plat with legal description. The topographic survey element included establishing a baseline along the route, location of existing improvements, location of drainage, sewerage, and water structures, locating trees and drip lines, and taking spot elevations. For the Servitude Survey, BFM located property corners on the affected properties, and adjacent lots, to verify the boundary. Deliverables included a detailed indelible prints and high-resolution PDFs, cross sections & Three-Point TIE worksheet, a metes-and-bounds legal description of the servitude, and AutoCAD drawing files in DWG format. (\$11,875 (fee); 2022)

Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, LA. BFM Corporation provided surveying services for the project; the scope of which consisted of verifying pipe sizes and inverts for drainage structures along the west side (only) of Central Avenue, which was located during a previous BFM project. BFM located any new drainage structures within the previous survey limits and determined the depth, size, and type of pipes within each drainage structure which were shown on the previous survey. This included catch basins, drop inlets, and ditch culvert pipes. Alterations/updates were noted on an updated version of the previous survey. (\$2,850 (fee); 2022)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying for this Drainage Evaluation Project (PW 2018-024-DR) in Jefferson Parish. The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (ROW) of Causeway Boulevard to easterly apparent R/W of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Christopher Lemley
Field Operations Manager/Survey Crew Chief

Project Assignment:

Field Operations Manager/Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

10 years (joined BFM in 2014); BFM Corporation, LLC | 2014 to present
18 years total (2006) G.E.C., Inc. | 2010 to 2014
Krebs, LaSalle, LeMieux Consultants, Inc. | 2006 to 2010

Education: Degree(s)/Year/Specialization:

High School Diploma

Active Registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger
Louisiana Boater Education - Boating Safety Certificate
Norfolk Southern Roadway Worker Protection Contractor Safety Certificate

Other experience and qualifications relevant to the proposed Project:

Chris Lemley's services as BFM's Field Operations Manager includes overseeing all field work and activity by company personnel. His surveying experience includes over 8 years as a Survey Crew Chief. His survey software experience includes projects involving Trimble, Topcon, Leica, and Hypack, and has maintained and operated GPS, Auto-Level, and Total Station. Notable past project work has included the New Orleans Museum of Art, Jackson Barracks Restoration, US Highway 11, NASA Michoud Cells 3 & 4, the St. Bernard Lot Next Door Program, and multiple Orleans Parish School Recovery projects (including L.B. Landry, George Washington Carver, and Alice M. Harte schools).

Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying for this Drainage Evaluation Project (PW 2018-024-DR) in Jefferson Parish. The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (ROW) of Causeway Boulevard to easterly apparent R/W of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope. (\$18,350 (fee); 2020)

TEC Professional Services Questionnaire

Other experience and qualifications: **Christopher Lemley (continued)**

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Westwego Drainage Pump Station No. 1, Jefferson Parish, LA. BFM Corporation provided services for a Limited Topographic Survey at the project site, Westwego Drainage Pump No. 1. The scope of services first re-established Site Horizontal and Vertical control, as these were established as part of a previous BFM project (BFM No. 9730). Services next included locating existing improvements within the designated Limits of Survey, taking elevations and cross sections, and verification of piping and utilities. (\$4,725 (fee); 2018)


Fulton Street Pump Station, Jefferson Parish, LA. BFM Corporation provided boundary with topographic survey for the Fulton Street Pump Station project. The scope of services included establishing horizontal control, setting Temporary Benchmarks, and plotting the location of improvements & topographic elements (man-made and natural). BFM also determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established. For the topographic survey, spot elevations did not exceed a 25-foot grid within the Limits of Survey and included bottom of canal elevations along adjacent wall. (\$11,890 (fee); 2017)

Bayou Segnette Drainage Pump Station No. 1 Survey Verification, Jefferson Parish, LA. BFM Corporation provided surveying services to verify horizontal and vertical control for the project site; an extension of a previous BFM project (#9303) where the firm provided topographic surveying services. Full documentation for the horizontal and vertical values of the control points established was provided. (\$550 (fee); 2020)

Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, LA. BFM Corporation provided surveying services for the project; the scope of which consisted of verifying pipe sizes and inverts for drainage structures along the west side (only) of Central Avenue, which was located during a previous BFM project. BFM located any new drainage structures within the previous survey limits and determined the depth, size, and type of pipes within each drainage structure which were shown on the previous survey. This included catch basins, drop inlets, and ditch culvert pipes. Alterations/updates were noted on an updated version of the previous survey. (\$2,850 (fee); 2022)

Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA. BFM Corporation provided boundary and topographic surveying services for the project. The scope of services included obtaining available title data, supplemented with courthouse research. BFM located property corners to establish rights-of-way, setting a closed traverse around the site, establishing Temporary Benchmarks (TBM), taking elevations, and plotting the location of improvements and topographic features, both natural and man-made. The scope of services included producing cross sections and plotting spot elevations on paving or other hard surfaces. (\$11,905 (fee); 2016)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
John Philip Thayer Procurement Director (Proposals & Project Management Support)	
Project Assignment:	
Project Management Support	
Name of Firm with which associated:	
 BFM CORPORATION, LLC Professional Land & Hydrographic Surveying	
Years' experience with this Firm:	
16 years (joined BFM in 2008); 17 years total (2007)	<i>BFM Corporation, LLC 2008 to present</i> <i>Delle Land Surveying 2007 to 2008</i>
Education: Degree(s)/Year/Specialization:	
Certificate, 2015, Land Surveying Services B.S., 2007, Physical Education, Trevecca Nazarene University	
Active Registration: Year first registered/discipline:	
N/A	
Other experience and qualifications relevant to the proposed Project:	
<p>Phil Thayer serves as BFM's Procurement Director, providing proposal preparation and Project Management Support, having considerable experience in field surveying services, including ALTA/as-built surveying, construction layout, boundary, topographic, cross-sections, GPS use, and numerous other surveying types.</p> <p>Mounes Subsurface Drainage – Phase I, Jefferson Parish, LA. BFM provided all requested topographic surveying services for Phase I of the Mounes Subsurface Drainage project, which extended from Dickory to Elmwood Park Boulevard). (\$26,240 (fee); 2017)</p> <p>Drainage Pump Station, Veterans North & South, Right-of-Way, 17th Street Canal, Jefferson Parish, LA. BFM prepared a topographic survey (with right of way & underground utilities locations) for this proposed pump station project. (\$26,540 (fee); 2014)</p> <p>Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA. BFM Corporation provided boundary and topographic surveying services for the project. The scope of services included obtaining available title data, supplemented with courthouse research. BFM located property corners to establish rights-of-way, setting a closed traverse around the site, establishing Temporary Benchmarks (TBM), taking elevations, and plotting the location of improvements and topographic features, both natural and man-made. The scope of services included producing cross sections and plotting spot elevations on paving or other hard surfaces. (\$11,905 (fee); 2016)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **John Philip Thayer (continued)**

Fulton Street Pump Station, Jefferson Parish, LA. BFM Corporation provided boundary with topographic survey for the Fulton Street Pump Station project. The scope of services included establishing horizontal control, setting Temporary Benchmarks, and plotting the location of improvements & topographic elements (man-made and natural). BFM also determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established. For the topographic survey, spot elevations did not exceed a 25-foot grid within the Limits of Survey and included bottom of canal elevations along adjacent wall. (\$11,890 (fee); 2017)

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM Corporation executed a Route Topographic Survey for the Allo Street project area, which extended from 4th Street to 6th Street. A baseline was established along the centerline of Allo Street, with Temporary Benchmarks at each intersection along the route. Cross sections taken on a 25 ft. grid. Existing improvements were located within the designated Limits of Survey, as were visible above-ground and underground utilities, piping, and natural features including trees and shrubbery. (\$12,855 (fee); 2019)

Westwego Drainage Pump Station No. 1, Jefferson Parish, LA. BFM Corporation provided services for a Limited Topographic Survey at the project site, Westwego Drainage Pump No. 1. The scope of services first re-established Site Horizontal and Vertical control, as these were established as part of a previous BFM project (BFM No. 9730). Services next included locating existing improvements within the designated Limits of Survey, taking elevations and cross sections, and verification of piping and utilities. (\$4,725 (fee); 2018)

Morton & Ingrid Pump Station, Jefferson Parish, LA. BFM executed a topographic survey, beginning at the Morton & Ingrid Pump Station, with said survey running along Morton Street to Elizabeth Street then continuing along Elizabeth Street towards West Napoleon Avenue and ending at the Elizabeth Street Pump Station. (\$27,500 (fee); 2012)

Oakwood Terrytown Drainage Improvements (HMGP) (Carol Sue Drainage Improvements), Jefferson Parish, LA. BFM provided topographic surveying services for the project. (JP PW 200-062-DR) (\$23,581 (fee); 2011)

West Bank Subsurface Drainage Improvement Project, Phase II, Bellemeade Boulevard to the Violet Canal Discharge, Jefferson Parish, LA. BFM provided topographic surveying for the project, which encompassed Bellemeade Boulevard from Briargrove to Brookmeade and Brookmeade from Bellemeade to the Violet Canal Discharge. (\$16,108 (fee); 2010)

Sena Drive Subsurface Drainage Improvements, Jefferson Parish, LA. BFM provided topographic surveying services for the Sena Drive Subsurface Drainage Improvements project, which extended along Sena Drive from West Esplanade Avenue (Canal No. 2) to Nero Street. (\$13,364 (fee); 2010)

Massachusetts Avenue Drainage Improvements, Jefferson Parish, LA. BFM provided topographic surveying services for the project, which extended from W Napoleon Avenue to Veterans Memorial Boulevard. (\$28,515 (fee); 2009)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
Dawn Hoffman Researcher/Archivist	
Project Assignment:	
Researcher/Archivist	
Name of Firm with which associated:	
 BFM CORPORATION, LLC Professional Land & Hydrographic Surveying	
Years' experience with this Firm:	
15 years (joined BFM in 2009); 27 years total (1997)	<i>BFM Corporation, LLC 2009 to present</i> <i>Fluor Corporation 2007 to 2009</i> <i>Geographic Computer Technologies, LLC 2000 to 2007</i>
Education: Degree(s)/Year/Specialization:	
A.D., 1999, Computer-Aided Drafting, Southeast College of Technology Certificate, 2003, Introduction to ArcGIS, Louisiana State University	
Active Registration: Year first registered/discipline:	
N/A	
Other experience and qualifications relevant to the proposed Project:	
<p>Dawn Hoffman serves as BFM's primary researcher and has more than 25 years of experience in this field. She is extremely knowledgeable with researching in various parishes and cities.</p> <p>Fulton Street Pump Station, Jefferson Parish, LA. BFM Corporation provided boundary with topographic survey for the Fulton Street Pump Station project. The scope of services included establishing horizontal control, setting Temporary Benchmarks, and plotting the location of improvements & topographic elements (man-made and natural). BFM also determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established. For the topographic survey, spot elevations did not exceed a 25-foot grid within the Limits of Survey and included bottom of canal elevations along adjacent wall. (\$11,890 (fee); 2017)</p> <p>Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, LA. BFM Corporation provided surveying services for the project; the scope of which consisted of verifying pipe sizes and inverts for drainage structures along the west side (only) of Central Avenue, which was located during a previous BFM project. BFM located any new drainage structures within the previous survey limits and determined the depth, size, and type of pipes within each drainage structure which were shown on the previous survey. This included catch basins, drop inlets, and ditch culvert pipes. Alterations/updates were noted on an updated version of the previous survey. (\$2,850 (fee); 2022)</p>	

TEC Professional Services Questionnaire

Other experience and qualifications: **Dawn Hoffman (continued)**

Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA. BFM Corporation provided boundary and topographic surveying services for the project. The scope of services included obtaining available title data, supplemented with courthouse research. BFM located property corners to establish rights-of-way, setting a closed traverse around the site, establishing Temporary Benchmarks (TBM), taking elevations, and plotting the location of improvements and topographic features, both natural and man-made. The scope of services included producing cross sections and plotting spot elevations on paving or other hard surfaces. (\$11,905 (fee); 2016)

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

Lafitte Drainage Project, Town of Jean Lafitte, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying services for a proposed drainage servitude project in the Town of Jean Lafitte in Jefferson Parish, LA. The project built on a previous BFM project (No. 10309). The project also included provision of boundary surveying in order to provide a servitude plat with legal description. The topographic survey element included establishing a baseline along the route, location of existing improvements, location of drainage, sewerage, and water structures, locating trees and drip lines, and taking spot elevations. For the Servitude Survey, BFM located property corners on the affected properties, and adjacent lots, to verify the boundary. Deliverables included a detailed indelible prints and high-resolution PDFs, cross sections & Three-Point TIE worksheet, a metes-and-bounds legal description of the servitude, and AutoCAD drawing files in DWG format. (\$11,875 (fee); 2022)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Bayou Segnette Drainage Pump Station No. 1 Survey Verification, Jefferson Parish, LA. BFM Corporation provided surveying services to verify horizontal and vertical control for the project site; an extension of a previous BFM project (#9303) where the firm provided topographic surveying services. Full documentation for the horizontal and vertical values of the control points established was provided. (\$550 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony Watson

CADD Technician (AutoCADD Drafting Services)

Project Assignment:

CADD Technician (AutoCADD Drafting Services)

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

13 years (joined BFM in 2011);
33 years total (1991)

BFM Corporation, LLC | 2011 to present
Krebs LaSalle Lemieux / GEC | 2008 to 2011
Doug Connally and Associates Land Surveying (Dallas, TX) | 1995-2008
Electrician | 1991 to 1995
City of Plano TX (Part-Time Drafting Services) | 1991

Education: Degree(s)/Year/Specialization:

Coursework - CAD, Avatech Solutions, Los Colinas, TX

Active Registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Anthony Watson has experience as a draftsman/survey technician, having started his career as an intern with the Surveying Department of the City of Plano, Texas. His experience through the years includes manual and computer-aided drafting for a wide range of projects, ranging from small lot surveys to subdivisions to municipal treatment and private industrial plants. He has experience in all facets of surveying (boundary, topographic, ALTA/ACSM, plan & profile, etc.) in both drafting and field environments.

Avenue D Drainage Improvements (Phase VIII: Allo Street), Metairie, Jefferson Parish, LA. BFM Corporation executed a Route Topographic Survey for the Allo Street project area, which extended from 4th Street to 6th Street. A baseline was established along the centerline of Allo Street, with Temporary Benchmarks at each intersection along the route. Cross sections taken on a 25 ft. grid. Existing improvements were located within the designated Limits of Survey, as were visible above-ground and underground utilities, piping, and natural features including trees and shrubbery. (\$12,855 (fee); 2019)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic

TEC Professional Services Questionnaire

Other experience and qualifications: **Anthony Watson (continued)**

and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Bissonet Plaza Drainage Improvements (Phase 1), Metairie, Jefferson Parish, LA. BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points. (\$7,980 (fee); 2020)

Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA. BFM Corporation provided boundary and topographic surveying services for the project. The scope of services included obtaining available title data, supplemented with courthouse research. BFM located property corners to establish rights-of-way, setting a closed traverse around the site, establishing Temporary Benchmarks (TBM), taking elevations, and plotting the location of improvements and topographic features, both natural and man-made. The scope of services included producing cross sections and plotting spot elevations on paving or other hard surfaces. (\$11,905 (fee); 2016)

Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, LA. BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying. (\$23,540 (fee); 2017)

North Arnoult Drainage Pump Station Improvements, Jefferson Parish, LA. Project involved a boundary with topographic survey, establishing a baseline parallel to the right-of-way. Points of intersection set were referenced by 3-point ties to topographic features in the area. Two temporary benchmarks were established. Existing improvements were located, including utilities, piping, and natural elements. Building corners within the limits of survey were also located, as were property corners in order to determine the rights-of-way and property boundary limits. (\$6,870 (fee); 2019)

Fulton Street Pump Station, Jefferson Parish, LA. BFM Corporation provided boundary with topographic survey for the Fulton Street Pump Station project. The scope of services included establishing horizontal control, setting Temporary Benchmarks, and plotting the location of improvements & topographic elements (man-made and natural). BFM also determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established. For the topographic survey, spot elevations did not exceed a 25-foot grid within the Limits of Survey and included bottom of canal elevations along adjacent wall. (\$11,890 (fee); 2017)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Curtis "Jay" Barrios
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years' experience with this Firm:

34 years (joined BFM in 1990);
39 years total (1985)

BFM Corporation, LLC | 1990 to present
Benson Mercedes Benz | 1989 to 1990
SECO Electric | 1987
Frishhertz Electric | 1986 to 1987
Plain Construction | 1985 to 1986

Education: Degree(s)/Year/Specialization:

High School Diploma

Active Registration: Year first registered/discipline:

American Traffic Safety Service Assn. – Traffic Flagger
Basic OSHA Training Class Completion
Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Jay Barrios' surveying experience includes boundary, hydrographic, and topographic. He has been the Survey Crew Chief for thousands of projects and is one of the more experienced surveyors in the area. Further, Mr. Barrios has been involved on major transmission projects for Entergy and South Central Bell (AT&T).

Coventry Drainage Pump Stations, River Ridge, Jefferson Parish, LA. BFM Corporation provided a Route Topographic Survey with Hydrographic Survey for the project, located in River Ridge, Louisiana. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Road). The hydrographic survey extended 500 feet into the river from the water's edge. The full scope of the project also included research of public land records; location of property corners; establishing a baseline along the rear property line and; establishing Temporary Benchmarks. Existing improvements were located, as well as visible above ground utilities and those underground utilities with visible surface evidence. The survey further determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established above. Trees were also located. Spot elevations were taken at 50-foot intervals within the Limits of Survey. (\$89,780 (fee); 2020)

TEC Professional Services Questionnaire

Other experience and qualifications: **Curtis "Jay" Barrios (continued)**

Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, LA. BFM Corporation provided surveying services for the project; the scope of which consisted of verifying pipe sizes and inverts for drainage structures along the west side (only) of Central Avenue, which was located during a previous BFM project. BFM located any new drainage structures within the previous survey limits and determined the depth, size, and type of pipes within each drainage structure which were shown on the previous survey. This included catch basins, drop inlets, and ditch culvert pipes. Alterations/updates were noted on an updated version of the previous survey. (\$2,850 (fee); 2022)

Fulton Street Pump Station, Jefferson Parish, LA. BFM Corporation provided boundary with topographic survey for the Fulton Street Pump Station project. The scope of services included establishing horizontal control, setting Temporary Benchmarks, and plotting the location of improvements & topographic elements (man-made and natural). BFM also determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established. For the topographic survey, spot elevations did not exceed a 25-foot grid within the Limits of Survey and included bottom of canal elevations along adjacent wall. (\$11,890 (fee); 2017)

Goose Bayou Drainage Pump Station, Lafitte, Jefferson Parish, LA. BFM Corporation provided boundary and topographic surveying services for the project. The scope of services included obtaining available title data, supplemented with courthouse research. BFM located property corners to establish rights-of-way, setting a closed traverse around the site, establishing Temporary Benchmarks (TBM), taking elevations, and plotting the location of improvements and topographic features, both natural and man-made. The scope of services included producing cross sections and plotting spot elevations on paving or other hard surfaces. (\$11,905 (fee); 2016)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Lafitte Drainage Project, Town of Jean Lafitte, Jefferson Parish, LA. BFM Corporation provided Route Topographic Surveying services for a proposed drainage servitude project in the Town of Jean Lafitte in Jefferson Parish, LA. The project built on a previous BFM project (No. 10309). The project also included provision of boundary surveying in order to provide a servitude plat with legal description. The topographic survey element included establishing a baseline along the route, location of existing improvements, location of drainage, sewerage, and water structures, locating trees and drip lines, and taking spot elevations. For the Servitude Survey, BFM located property corners on the affected properties, and adjacent lots, to verify the boundary. Deliverables included a detailed indelible prints and high-resolution PDFs, cross sections & Three-Point TIE worksheet, a metes-and-bounds legal description of the servitude, and AutoCAD drawing files in DWG format. (\$11,875 (fee); 2022)

TEC Professional Services Questionnaire

- L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this project. Please include and all work performed for Jefferson Parish. Please attach additional pages if necessary.**

PROJECT NO. 1

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lafitte Drainage Project, Town of Jean Lafitte, Jefferson Parish, Louisiana</p> <p>Professional Engineering & Environmental Consultants, Inc. 1065 Muller Pkwy Ste B Westwego LA 70094</p> <p>Jeffrey P. Meyers, P.E., 225-268-6925 jeff@peecinc.com</p>	<p>BFM provided Route Topographic Surveying services for a proposed drainage servitude project which built on a previous BFM project (No. 10309). The project also included provision of boundary surveying in order to provide a servitude plat with legal description. The topographic survey element included establishing a baseline along the route, location of existing improvements, location of drainage, sewerage, and water structures, locating trees and drip lines, and taking spot elevations. For the Servitude Survey, BFM located property corners on the affected properties, and adjacent lots, to verify the boundary. Deliverables included a detailed indelible prints and high-resolution PDFs, cross sections & Three-Point TIE worksheet, a metes-and-bounds legal description of the servitude, and AutoCAD drawing files in DWG format.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2022	N/A	\$11,875 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Central Avenue Roadway Drainage & Water Main Improvements, Jefferson Parish, Louisiana</p> <p>Jefferson Parish Department of Capital Projects 1221 Elmwood Park Blvd Ste 906 Jefferson LA 70123</p> <p>Neil Schneider, 504-736-6833 nschneider@jeffparish.net</p>	<p>BFM's scope of services consisted of verifying pipe sizes and inverts for drainage structures along the west side (only) of Central Avenue, which was located during a previous BFM project. BFM located any new drainage structures within the previous survey limits and determined the depth, size, and type of pipes within each drainage structure which were shown on the previous survey. This included catch basins, drop inlets, and ditch culvert pipes. Alterations/updates were noted on an updated version of the previous survey.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2023	N/A	\$2,850 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, Louisiana</p> <p>AIMS Group, Inc. 4421 Zenith Street Metairie LA 70001</p> <p>Lowell Pitré, P.E., 504-887-7045 ljp@aimsgroupinc.com</p>	<p>The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2020	N/A	\$32,280 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Mounes Street Subsurface Drainage (Phase IV, Dickory Avenue to Elmwood Park Boulevard), Jefferson Parish, Louisiana</p> <p>APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 info@aptim.com</p>	<p>BFM provided topographic surveying services for Phase IV of the project, part of a multiphase program to improve drainage issues on Mounes Street. Phase IV of the project involved a topographic survey of the project, extending from Dickory Avenue to Elmwood Park Boulevard. Services provided by BFM included establishment of a baseline, setting temporary benchmarks (TBMs), elevation surveys, locating improvements and utilities as well as natural elements, and right-of-way surveying.</p>	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2017	N/A	\$23,540 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Coventry Drainage Pump Stations, River Ridge, Jefferson Parish, Louisiana ECM Consultants, Inc. 4409 Utica Street Suite 200 Metairie LA 70006 Sunina Shrestha, P.E., 504-885-4080 sshrestha@ecmconsultants.com	BFM provided a Route Topographic Survey with Hydrographic Survey. The levee and hydrographic survey area was noted as 400 feet wide (200 ft. in either direction of the extended centerline of Colonial Heights Rd.). The hydrographic survey extended 500 ft. into the river from the water's edge. The full scope of the project also included research of public land records; location of property corners; establishing a baseline along the rear property line and; establishing Temporary Benchmarks. Existing improvements were located, as well as visible above ground utilities and those underground utilities with visible surface evidence. The survey further determined the depth, size, and type of pipes within surface observable drainage, sewerage, and water structures as established above. Trees were also located. Spot elevations were taken at 50-ft. intervals within the Limits of Survey.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2020	N/A	\$89,780 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Metairie Road Drainage Evaluation, Metairie, Jefferson Parish, Louisiana GEC, Inc. 3445 N Causeway Blvd Ste 401 Metairie LA 70002-3779 Jerome Lohmann, 504-207-6926 jlohmann@gecinc.com	BFM provided Route Topographic Surveying for this Drainage Evaluation Project (PW 2018-024-DR) in Jefferson Parish. The scope of services included a full Route Topographic Survey (includes all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work) from gutter line to gutter line along Metairie Road from the westerly apparent right-of-way (ROW) of Causeway Boulevard to easterly apparent R/W of Focis Street. The project encompassed approximately 10,400 linear feet, with cross-sections and elevations surveyed included as part of the scope.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2020	N/A	\$18,350 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Bissonet Plaza Drainage Improvements (Phase 1, Elmwood Parkway and Craig Avenue), Metairie, Jefferson Parish, Louisiana Meyer Engineers Ltd. 4937 Hearst St. Ste. B Metairie LA 70001 Ana Theriot, P.E., 504-885-9892	BFM prepared a Route Topographic Survey for Phase 1 of the project, located at Elmwood Parkway and Craig Avenue. This project built upon work executed by the firm for a previous extensive surveying project involving Bissonet Plaza subdivision; this allowed for BFM to build upon established surveys to save time and expenses. Surveying for each element of the project included services included confirming all controls and benchmarks, topographic features, location of improvements and utilities, location of natural elements as applicable, and notation of right-of-way points.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2020	N/A	\$7,980 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
North Arnoult Drainage Pump Station Improvements, Jefferson Parish, Louisiana Hartman Engineering, Inc. 527 W. Esplanade Ave Suite 300 Kenner LA 70065 Rolland A. Mura, 504-466-5667 rmura@harteng.com	Project involved a boundary with topographic survey, establishing a baseline parallel to the right-of-way. Points of intersection set were referenced by 3-point ties to topographic features in the area. Two temporary benchmarks were established. Existing improvements were located, including utilities, piping, and natural elements. Building corners within the limits of survey were also located, as were property corners in order to determine the rights-of-way and property boundary limits.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2019	N/A	\$6,870 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Avenue D Drainage Improvements (Phase VIII: Allo Street) , Metairie, Jefferson Parish, Louisiana Hartman Engineering, Inc. 16563 Airline Hwy Ste A&B Prairieville LA 70769 Jared Monceaux, P.E. , 225-313-4617 jmonceaux@harteng.com	BFM Corporation executed a Route Topographic Survey for the Allo Street project area, which extended from 4th Street to 6th Street. A baseline was established along the centerline of Allo Street, with Temporary Benchmarks at each intersection along the route. Cross sections taken on a 25 ft. grid. Existing improvements were located within the designated Limits of Survey, as were visible above-ground and underground utilities, piping, and natural features including trees and shrubbery.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2019	N/A	\$12,855 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's contact information:	Nature of Firm's Responsibility:	
Westwego Drainage Pump Station No. 1 , Jefferson Parish, Louisiana Jefferson Parish Department of Drainage 1221 Elmwood Park Blvd Ste 907 Harahan LA 70123 Ben Lepine , 504-736-6759 blepine@jeffparish.net	BFM Corporation provided services for a Limited Topographic Survey at the project site, Westwego Drainage Pump No. 1. The scope of services first re-established Site Horizontal and Vertical control, as these were established as part of a previous BFM project (BFM No. 9730). Services next included locating existing improvements within the designated Limits of Survey, taking elevations and cross sections, and verification of piping and utilities.	
Completion Date (Actual or estimated:)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2018	N/A	\$4,725 (fee)

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1.	<div>BFM Corporation is not currently, nor has it previously been involved, in litigation with Jefferson Parish.</div>	
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

BFM CORPORATION, LLC

Professional Land & Hydrographic Surveying

CRITERIA 1 | PROFESSIONAL TRAINING AND EXPERIENCE

Established in 1982, **BFM Corporation, LLC, Professional Land & Hydrographic Surveying**, provides services to public & private concerns throughout Louisiana and the Gulf South. For over 40 years, BFM has provided surveying services covering all facets of engineering, construction, and forensics; topographic, and hydrographic, as well as drone-based surveying and high-definition laser scanning.

BFM Corporation is a majority Woman-Owned Business Enterprise (WBE) as well as a Hudson Initiative certified Small & Emerging Business and Small Entrepreneurship in Louisiana.

Our capabilities include the following and more:

- Topographic Surveying
- Drone Surveying
- Photogrammic & LiDAR and 3D Laser Scanning
- Bathymetric / Hydrographic Surveys
- Property, Boundary, and Right-of-Way Surveys
- Maps, Cross-Sections, & Data Sets; Benchmarks

TEC Professional Services Questionnaire

N. continued.

- Construction-Related Surveying and Builder's Package Surveys
- American Land Title Association (ALTA) Surveys

BFM's project work routinely involves **extensive records and related research** as an element of successful completion, as well as coordination with the client, agency or department. BFM has the personnel to make sure this is done correctly and expeditiously.

Our **Survey Field Crews** are equipped with Leica Viva and Leica Captivate Data Collectors, as well as Leica GPS Smart Antennas. Each GPS unit is linked to the Leica SmartNet Network, giving each crew the ability for Real Time Kinematic Positioning (RTK), derived from the Global Navigation Satellite System (GNSS). Furthermore, each crew is outfitted with Leica TS series robotic total stations, simplifying and expediting projects. BFM can also use in-house drones and 3D scanners to further analyze sites and projects. BFM's crews are trained to use this equipment to its full potential to maximize accuracy and efficiency in the field.

BFM offers **Drone Surveying Services**, featuring a DJI Matrice 600 Pro drone outfitted with a Sony A7R3 42-megapixel camera, Pixhawk Triggering System, VMAP PPK system, and an A3 Pro Flight Controller. It can capture 50 acres of land allowing BFM to quickly & accurately capture data and facilitates quicker field work to produce highly accurate and precise surveying information. Deliverables feature Clean Point Cloud, 3D Mesh, Orthomosaic, and AutoCAD DWG Topographic.

BFM's **3D modeling capabilities** allow us to process & model for any design purpose. High-definition scanner data is processed using software from Leica and Autodesk. BFM is working on non-traditional survey deliverables, including virtual tours, live walkthroughs, detailed pipe rack modeling, and modeling for use with Autodesk Revit Architecture.

When needed, BFM provides **bathymetric surveying** to handle **any hydrographic surveying tasks**. For large rivers and bodies of water, we are equipped with Teledyne Odom Hydro Solutions' Hydro Trac Single Beam Echo Sounder. For smaller bodies of water, BFM uses an SL20 Remote Controlled Boat equipped with CEE Scope Dual Channel Echo Sounder. We use Hypack Software to process collected data. Further, BFM can execute multi-beam scans, side scans and magnetometer surveys upon request.

CRITERIA 2 | SIZE OF FIRM

As noted, BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. BFM has no issue with meeting the project deadlines set forth by our clients, both municipal and private. It is our continual goal to keep this reputation solid. Further, we establish base costs and fees for our services, and work with our clients to meet all project budgets.

As noted in **item E** of this form, BFM currently has a **full-time staff of two dozen people**, including **two Registered Professional Land Surveyors, Survey Field Crew Personnel, and AutoCAD drafting personnel**, as well as **complete administrative and support staff**.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 3 | CAPACITY FOR TIMELY COMPLETION

BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by a contract or project engineer. It is our goal to keep this reputation solid. We establish base costs and fees for our services, and work with our clients to meet all project budgets. Our workload and scheduling, and proximity to the project site, will allow for quick assignment of personnel to any directed project.

BFM Corporation's **Ralph P. Fontcuberta, Jr., PLS**, Executive Vice President, is a **Louisiana-Registered Professional Land Surveyor (since 1974)** and meets or exceeds any minimum requirements for any surveying project. He has been **providing surveying services in Louisiana for over 50 years** and brings an almost incalculable wealth of experience in the region to any project, especially in Southeast Louisiana.

Chad M. Poché, P.E., Executive Vice President, brings **more than 25 years of experience** to assist in completing projects on time and within budget. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana and has been the geotechnical engineer of record for thousands of projects.

Gary J. Lambert, Jr., PLS, Vice President is a **registered Professional Land Surveyor** and provides Project Management & Drafting Oversight and is the first point of contact for clients on technical matters. He meets with engineering, architectural, and government officials to discuss various project needs.

Our personnel included **multiple survey crews** and a **fully-staffed drafting department** to handle any project needs; they are thoroughly trained and extensively familiar with the region and needs of various types of surveying projects.

CRITERIA 4 | PAST PERFORMANCE ON PARISH CONTRACTS

BFM Corporation has provided **surveying services in Jefferson Parish since 1982**, both **directly to Parish agencies and as a consultant to firms serving the Parish**. The firm has executed many hundreds of projects in the Parish, including both direct Parish projects and State agency projects (CPRA, Louisiana DOTD, etc.), not to mention the scores of surveying projects for private individuals and industry.

As noted, Mr. Fontcuberta has **over half a century of professional land surveying experience**, including over 40 years with BFM. **He has provided professional surveying services for thousands of projects for and throughout Jefferson Parish.**

CRITERIA 5 | LOCATION OF THE PRINCIPAL OFFICE

BFM has called Jefferson Parish home office location since the firm's inception in 1982; our principal office is located in Jefferson Parish at 15 Veterans Memorial Boulevard in Kenner.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 6 | LEGAL STATEMENT

BFM Corporation is **not involved in litigation with Jefferson Parish** nor with any of our clients, as is noted in Item M of this form.

CRITERIA 7 | PRIOR SUCCESSFUL COMPLETION OF PROJECTS

For over 40 years, BFM Corporation has completed thousands of projects throughout Jefferson Parish and Southeast Louisiana, both to municipal and various private clients, similar to the project at hand, not to mention other drainage projects in a wide range of sizes, from small lot to Parish-wide endeavors. **Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).** Further, BFM has worked with virtually every municipality in the region. We enjoy a high repeat-business rate with all our clients. We offer the following specific references for contact:

Mark R. Drewes, P.E., Director, Jefferson Parish Public Works Department

(504-736-6783 | JPPW@jeffparish.net)

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish Public Works Dept.

(504-736-6783 | JPPW@jeffparish.net)

José A. Gonzales, CAO, City of Kenner

(504-468-4090 | jgonzalez@kenner.la.us)

Angela DeSoto, P.E., Director of Engineering, Jefferson Parish

(504-736-6511 | ADeSoto@jeffparish.net)

Sid Trouard, P.E., Program Manager, Jefferson Parish Sewerage Capital Improvement Program

(504-736-6386 | STrouard@jeffparish.net)

Khalid L. Saleh, PhD, Capital Program Administrator, New Orleans Dept. of Public Works

(504-658-8000 | khsaleh@nola.gov)

Ben Lapine, Acting Director, Department of Drainage, Jefferson Parish

(504-736-6661 | JPSewerage@jeffparish.net)

Greg Cromer, Mayor, City of Slidell

(985-646-4333 | gcromer@cityofslidell.org)

Our professional work history is exemplary. We strive to provide on-time and technically thorough project deliverables at the budget set by our clients.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: 

Print Name: Chad M. Poché, P.E.

Title: Executive Vice President

Date: June 6, 2024

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:	Public Address:
BFM Corporation, LLC	15 Veterans Memorial Boulevard Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000008	Active	09/11/1984	09/30/2025	Mr. Ralph P. Fontcuberta Jr. # PLS.0004329



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number	Expiration Date
PLS.0004329	09/30/2024

Status: **Active**



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Chad Mitchell Poche

License/Certificate Type - Number	Expiration Date
PE.0027667	09/30/2024

Status: **Active**




LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Gary James Lambert Jr.

License/Certificate Type - Number	Expiration Date
PLS.0005259	03/31/2026

Status: **Active**



LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. William Mead Farber

License/Certificate Type - Number	Expiration Date
EI.0033903	03/31/2025

Status: **Active**



Division of Small and Emerging Business Development
SEBD CERTIFICATION

BFM CORPORATION, LLC

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 7/19/2019 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

Issued at Baton Rouge, Louisiana 7/19/2019

This certification expires on: 7/19/2029

Certification No. 9551

John W. Matthews, Jr.,
Executive Director, Entrepreneurial Services



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

BFM CORPORATION, LLC

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 9/13/2023 to 9/13/2024 .

Certification No. 9551

Stephanie Hartman,
Director, Entrepreneurial Services



City of Kenner

1926 18th Street
Kenner, LA 70062

BFM CORPORATION
15 VETERANS BLVD
KENNER, LA 70062

**** NOTICE ****

This license becomes null & void if ownership, business name or address is changed. Licensee must apply within 10 days of such change for transfer. Fee will apply. All applicable building & zoning regulations pertaining to business location must be followed.

BFM CORPORATION, LLC
15 VETERANS MEMORIAL BLVD
KENNER, LA 70062

2024

Business License ID
407

Type
LIMITED LIABILITY COMPANY
SURVEYING SERVICES

**Business
License**

Number
1595

Issued
01/09/2024

Valid thru
12/31/2024

***** POST THIS LICENSE IN A CONSPICUOUS PLACE *****